Antiquity

A Quarterly Review of Archæology

Edited by O. G. S. Crawford, F.S.A.

MARCH 1934

	Page
Editorial Notes	1
History in the Open Air. By H. J. Randall	5
Aspects of the Neolithic and Chalcolithic Periods in Western Europe. By Jacquetta Hawkes	24
Notes on the Origins of Hiberno-Saxon Art. By A. W. Clapham	43
A Scandinavian Cremation-Ceremony. Translated by Charis Waddy, with Note by H. L. Lorimer	58
The Mountain of 'Uweinat. By W. B. K. Shaw	63
The Nine Huntings. By Iorwerth C. Peate	73
Sidonius and His Times. By the Editor	81
Notes and News :—	
The 'Aquatile Beast' of Ness, 85 ; Cyprus Museum Excavations (2 *plates*), 86 ; Race and Culture, 90 ; The Hanging Bowl in Irish Literature, 93 ; Ancient Glass, 94 ; Early Man in East Africa, 95 ; Persepolis, 97 ; The Anonymous Life of St. Cuthbert, 97 ; Cremation-ceremony, 101	
Recent Events	102
Recent Articles	106
Reviews (*for list see overleaf*)	110

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REVIEWS

Page

Homer and Mycenae. *By* Martin P. Nilsson – – – – – – – 110

Economic Survey of Ancient Rome. *Edited by* Tenney Frank – – – – – 113

Psychology of a Primitive People. *By* S. D. Porteous – – – – – – 114

Ouvrages de Pierre Sèche des Cultivateurs d'Auvergne et la prétendue découverte d'une Ville aux Côtes de Clermont. *By* P.-F. Fournier – – – – – 117

Middelalderske Byfund fra Bergen og Oslo. *By* Sigurd Grieg – – – – 118

The Old Stone Age. *By* M. C. Burkitt – – – – – – – – 118

Primitive Arts and Crafts. *By* R. U. Sayce – – – – – – – 118

Handbook to the Roman Wall. *By* J. C. Bruce. *Edited by* R. G. Collingwood – 120

Die Schwedische Bootaxtkultur und ihre Kontinental Europäischen Voraussetzungen. *By* J.-E. Forssander – – – – – – – – – – 120

Athenian Financial Documents. *By* B. D. Meritt – – – – – – – 122

Documents et Notes Archéologiques. *By* Louis Deglatigny – – – – – 123

Map of the Trent Basin (*Ordnance Survey*) – – – – – – – – 124

English Gothic Churches. *By* Charles W. Budden – – – – – – 125

La Sculpture Irlandaise pendant les douze premiers siècles de l'Ère Chrétienne. *By* Françoise Henry – – – – – – – – – – – 125

Irish Historical Documents. *Edited by* Patrick Power – – – – – – 126

EDITORIAL NOTICES

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CONTENTS:

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Antiquity

A Quarterly Review of Archaeology

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Editorial Notes

A READER of ANTIQUITY suggested recently that we should start a ' comic section ' ; and a reference to this in our last number has prompted an American reader to send a friendly protest. We are not seriously thinking of having a comic section, but it is certainly not for lack of material, and in proof of this we propose to devote these pages to a few instances which have all occurred since our last number was published. We do so in the hope of giving our readers and the general public some idea of difficulties encountered by the professional archaeologist and others concerned with the advancement and diffusion of real knowledge. These difficulties are not minimized by the laws of libel which operate in favour of the crank, the charlatan and the common swindler.

The best story of the season unquestionably comes from The Wash, where King John lost his luggage ; but it is a story that is still but half told, and the really funny part comes at the end. We shall not therefore spoil it by premature publicity, especially as some of our readers may already have read an excellent and well-informed summary in *John Bull* (vol. LV, 13 Jan., 1934, 8–9). When the time comes we promise to give as sober and restrained an account as possible.

From the sands of The Wash to the sands of the Libyan desert and 'the unexplored Upper Nile and Abyssinia'. Here or hereabouts 'one of the largest scientific expeditions of recent years led by Count Byron de Prorok' hopes to find 'the body of Alexander the Great and King Solomon's mines'. Later on such minor items as the 'Royal Tombs in the Mountain of the Dead', the 'lost oasis of Zerzera' (*sic*), the 'famous emerald mines of Cleopatra' will be roped in. 'Lost African civilization will also be sought, linking up the theory that the North Africans and the Mayans in America both originated from the lost continent of Atlantis'. But it is always as well to have a second string to even the best-linked theory, and further on we are told that 'Prorok expects to find another Atlantean migration in this research' in Abyssinia.

The account from which we quote, published in *The Egyptian Gazette* ('about 14 December 1933'), concludes by stating that 'the expedition is being undertaken under the auspices of the International Anthropological Institutes of the British, French, Italian, Egyptian and Ethiopian Governments'; and that 'in addition to Count Byron de Prorok, F.R.G.S., the party includes' certain persons named. The expression 'International Anthropological Institutes' has no meaning; but if it is meant to include (as obviously it is) the Royal Anthropological Institute of Great Britain and Ireland, we are informed that the statement is incorrect. We also understand that Count Byron de Prorok is not a fellow of the Royal Geographical Society.

Armenia supplies the next instalment. In the *Sphere*, 16 December 1933, were published four illustrations 'taken by Mr Carveth Wells, the American traveller'. We are further informed that 'illustrations of this type have been banned since the advent of Stalin (!), and it was only with the greatest difficulty that Mr Wells was able to obtain them'. The Editor of the *Sphere* evidently does not read ANTIQUITY as carefully as he should. If he did he would have known that one of his pictures—or rather another picture of the same objects, a rather better one!—had already been published in ANTIQUITY (1932, VI, 463–6, PLATE II). This and the others were taken by the Editor on 19 June 1932, without the need of asking special permission and without experiencing the

slightest difficulty. Further, the objects shown in these two pictures are *not* ' Hittite carvings found by Mr Carveth Wells during his visit to Armenia ', and shown by a cuneiform inscription to ' belong to a period between the twelfth and seventeenth centuries, B.C.'. Nothing of the kind ; they are the carved capitals of an early Christian church, whose ruins are seen in the background ; and they were not found by Mr Wells but by archaeologists of the Armenian Government by whom the site was excavated and subsequently scheduled as an ancient monument.

Another illustration on the same page is of the ' fourth century pulpit ' in the cathedral of Mtzhet—which is not in Armenia but in Georgia, of which country it is the old capital. In this cathedral the Editor of ANTIQUITY also took a photograph—of a fresco on the wall ; though unfortunately it was a failure. The custodian, a priest, raised no objection whatever to this proceeding, when, as courtesy demanded, his permission was asked.

Next we are shown a photograph—said to be the first taken—of ' an Armenian monk holding the spear-head with which one of Pilate's soldiers is believed to have pierced the side of Christ at the Crucifixion. Its authenticity has never been definitely established '. This so-called spear-head is an obvious fake—which helps to explain the previous reluctance of its guardians to have it photographed.

Finally we are introduced to 'members of the Kheysur tribe' who ' are believed to be descendants of the Crusaders (and) to speak the English language of the time of Richard Coeur de Lion '. What rubbish ! Of the existence of these people, armed with shields and swords and chain mail, there can be no question (though they belong to the Caucasus, not to Armenia). But the rest of the statement is quite inaccurate and misleading. As if any language would remain unchanged for over 700 years, apart from the fact that the alleged Crusader connexion is baseless and in the highest degree improbable.

We close this merry hour listening in to Mr B. ' discussing an archaeological matter with my good friend Mr A.', in the columns of the *Hertford Mercury*. What is it about ? Why, the deluded Mr A. derives Ermine Street from 'the word "ermen" (which) would denote " side " or " arm " road in Egyptian '. Both Mr A. and Mr B. agree to ' recognize an Egyptian colonization of Britain ' ; but in this instance Mr B. prefers to find his derivatives nearer home, in an Anglo-Saxon word ' herman ',* meaning, so far as we understand Mr B. (which is not far), ' military road '.

Even comedy has its comic relief ; and with this last episode we take a fond farewell of all our saneness. Good-night, everybody, good-night !

The SUBSCRIPTION to ANTIQUITY for 1934 is now DUE. We would remind our Subscribers of the form and envelope inserted in the December number for the purpose of remitting payments. *An early response will be much appreciated as this will save avoidable trouble in having to send out direct reminders.*

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*Actually the word hereman (not herman) does occur once in the whole of Anglo-Saxon literature, meaning not a ' military road ' but a soldier ; and the real origin of the name Ermine Street is clearly and authoritatively stated by the Editors of the English Place-Name Society (' What is now the name of the whole road from London to Lincoln was originally given to that stretch of it which ran through the land settled by the *Earningas*, *i.e.*, by *Earn* and his people '. *Beds. & Hunts.*, 1926, p. 3).

History in the Open Air

by H. J. Randall

THE face of the country is the most important historical document that we possess. Upon the map of England—' that marvellous palimpsest '—is written much of English history: written in letters of earth and stone, of bank and ditch, of foliage and crop. As is the case with every map, the writing is not such as he that runs may read. It needs patience to discover, knowledge to decipher, insight, sometimes amounting to genius, to interpret. But the writing is there, all else awaits the competence of the reader.

The idea has grown slowly, and historians have assimilated it more slowly still. To many it is entirely repugnant: to others it is completely alien. There are historians whom it would be inequitable to disparage and dangerous to neglect, to whom documents are documents and men are just men, affected neither by ancestry nor environment. To these the face of the country is meaningless, and the influence of physical conditions a fond thing vainly imagined. Some go so far as to recognize that the men of the forest are somehow different from the men of the desert, but beyond distinctions of this kind their insight does not penetrate.

We may call such a view of things ' eighteenth century ', but it is by no means confined to that age of dignity and generalization. Yet that was the century that saw the beginnings of a healthy reaction. It came from those antiquaries that most historians neglected, and many affected to despise. Stukeley, busy, fussy and credulous, was yet ever ready with his pencil, never neglected his maps, and was filled with the determination to see things before describing them. General Roy added to his lifelong labours in the cause of the mapping of England an equally intense interest in archaeology, to which his *Military Antiquities of the Romans in North Britain* bears eloquent tribute. He bequeathed to the Ordnance Survey the sound tradition that no map of the country should omit its antiquities.

But a greater than Stukeley carried the method as far as it could be carried in that age. Richard Colt Hoare was essentially an antiquary

of the open-air school, without in the least neglecting the records and the documents. After tours on the continent more than grand, resulting in hundreds of drawings and thousands of notes, he followed Giraldus Cambrensis through Wales, and finally produced the greatest of all the old county histories, *Ancient and Modern Wiltshire*. All the relics of the past civilizations, barrows, stone circles, earthworks, roads, pavements, buildings, are there described in their proper situations; and with the help of William Cunnington the spade was used as an instrument of archaeological discovery.* The last part of the incomplete *Modern Wiltshire* appeared in 1844—six years after Hoare's death. In 1849, appropriately enough at the Salisbury meeting of the Archaeological Institute, a paper was read on 'The Early English Settlements in South Britain'. It was to have a number of successors, and they were to have a great influence upon the line of study that we are tracing. With the rise of the Oxford school of historians to a position of paramount influence, in the 'seventies of the last century, the study of history in the open air began to come into its own. In those spacious days, when

> 'ladling butter from alternate tubs,
> Stubbs buttered Freeman, Freeman buttered Stubbs',

Freeman, Stubbs and Green combined to butter Doctor Edwin Guest, Master of Gonville and Caius College in the University of Cambridge, the author of the above mentioned papers. Except for the occasional passage of a vacuum cleaner, thick layers of dust now cover Guest's *Origines Celticae* (*a fragment*) *and other contributions to the History of Britain*. It is the inevitable fate of all pioneers in scholarship and science. They show the new method, but others assimilate it and carry it to perfection. 'It was the vigorous forward man who struck out the rough notion, though it was the wise and meditative man who improved upon it and elaborated it, and whom posterity reads'. This is not to say that Guest's results have stood the test of time. Since Dr Cyril Fox has shown that all our dykes belong to the Dark Ages, we can no longer call the Wansdyke a 'Belgic Ditch', nor do we agree that the Belgae were the probable builders of Stonehenge. But these matters are of small account. The important fact is that Guest was right in his method. He recognized that the dykes were boundary ditches, though he may have been mistaken in their makers and their

* A delicious sentence must be rescued from the life of Hoare in D.N.B.: 'Hoare, who was a fellow of the Royal Society and of the Society of Antiquaries, suffered greatly from rheumatic gout in the latter part of his life, and was deaf for some years'. Is this meant as a consequence, or merely a coincidence?

time. He realized that the invasions and settlements of England were determined by its physical features, and that the historical story must be fitted into the physical setting. He used all the methods of antiquarian research except one, and he ever insisted upon exploring the country himself, sometimes ' with half the village in company '. His works are forgotten, but his influence will survive.

In fact Guest taught the Oxford school, as they fully and generously acknowledged. He taught Freeman to explore the countryside of Somerset, and to write the *Historical Geography of Europe*. He taught Green to ' largely avail himself ' of ' some resources which have been hitherto unduly neglected '.

' Archaeological researches on the sites of villas and towns, or along the line of road or dyke, often furnish us with evidence even more trustworthy than that of written chronicle ; while the ground itself, where we can read the information it affords, is, whether in the account of the Conquest, or in that of the settlement of Britain, the fullest and the most certain of documents. Physical geography has still its part to play in the written record of that human history to which it gives so much of its shape and form ; and in the present work I have striven, however imperfectly, to avail myself of its aid '.[1]

The geographical method which Green applied to the interpretation of the English conquest was directly due to the influence of Guest, and the plentiful maps in *The Making of England* are an expansion of his principles. But the use of one instrument had not been perfected in his time. Excavations of archaeological sites had certainly been carried out, but they were for the most part unscientific in character. The purpose of the excavators was ' finds ', and the record of the surrounding details that gave the finds their meaning was neglected, or rather its importance was not appreciated. A notable precursor of the better method was William Cunnington, working with Colt Hoare. Two men were primarily responsible for making the spade the one essential implement of scientific archaeology. One was Canon Greenwell, who in the intervals of inventing and using one of the most famous of artificial trout flies, explored barrows without number in the Northern counties, and carefully recorded the results of his excavations. The other was Pitt-Rivers.

Augustus Henry Pitt-Rivers (*né* Lane Fox), 1827–1900, ' raised English archaeology to a new and higher level '. In fact he founded the modern method of scientific excavation. The four volumes of

[1] *The Making of England*, 1881, preface, vii.

Excavations in Cranborne Chase are not merely a record of exploration, they are the standard exposition of a method that every qualified antiquary has followed ever since. The frequent references to them in archaeological papers show the value of the details they record, but the unacknowledged influence of the digging, the recording, and the interpretation are felt in every archaeological excavation and every text-book of method.

The next stage was the geographical,—to set out the records on a map and look at them. There history and archaeology really met, and there history was taken out into the open air.

In this connexion it is sufficient to mention the names of Mr O. G. S. Crawford and Dr Cyril Fox. The pioneer of the method was Mr Crawford,* and the paper that started the whole movement on its way was the ' Distribution of Early Bronze Age Settlements in Britain ' read before the Royal Geographical Society, and published in the *Geographical Journal* in 1912.[2] All the canons of the geographical study of archaeology are implicit in that paper. For the first time archaeological finds were plotted on distribution-maps and inferences drawn from the results. The objects chosen were the flat celts, the beakers, and the gold circlets or lunulae. The invasion of the Beaker people is now such a fundamental fact in the prehistory of Britain that it is difficult to realize that they were only identified as a separate people early in the present century, and that in Mr Crawford's paper, only just over twenty years ago, the areas of their settlements were shown for the first time. Mr Crawford's thesis has been so thoroughly assimilated that its originality is hard to realize. In the same year (1912) Lord Abercromby's great work on the Bronze Age Pottery was published and in it the same method of mapping the finds was practised.

To find out how far we have moved since then it is only necessary to refer to the first edition of the British Museum Bronze Age Guide.

The reason for this late appreciation of the importance of geographical control was the very matter that we are discussing—history would not be taken out into the open air. In a note which did not appear in the published paper Mr Crawford made some remarks so apposite that we take leave to quote them.

> ' The distributional aspect of the subject (of prehistoric archaeology) has been almost as completely ignored as the evolutionary. This is partly because most prehistorians have been essentially townsmen and so out of touch with nature ; they are the last people to understand the conditions of prehistoric life.

* But see note opposite.—Ed. [2] *Geographical Journal*, 1912, xl, 184, 304.

This is why some of the articles in the leading archaeological journals of the last century are so amazingly deficient in the commonsense of the country dweller ; and why the proceedings of small country field clubs are often far ahead of them in showing a true appreciation of prehistoric problems. The townsman, and his brother the collector, rarely get behind the things themselves to the people who made them '.

Note by the Editor

[No one is ever the first to do anything, and with regard to Mr Randall's comment on the beginning of distribution-maps (p. 8) it is only right that I should add a note on the earlier workers who influenced me in this research.]

The principal one was the Hon. John Abercromby (later Lord Abercromby), whose work on beakers—a name which he invented—was first made public in a paper read before the British Association in 1902, and again before the Anthropological Institute in London. It was published in the Institute's Journal, 1903, xxxii (N.S. v) 375–94, under the title ' The Oldest Bronze Age Ceramic type in Britain '. This was followed by a paper on ' A proposed Chronological arrangement of the Drinking-cup or Beaker class of fictilia in Britain ', published in *Proc. Soc. Ant. Scot.* 1904, xxxvii, 323–410, with a distribution-map. In the same year appeared in Germany the first of those articles on the distribution of bronze implements in Germany by Lissauer, who was the spiritual father of the Bronze Implement Committee of the British Association. (*Zeitschrift für Ethnologie*, 1904–7, vols. 36–9). These articles were accompanied by maps on a larger scale (1 : 2,500,000) than anything previously employed for this purpose. They also showed high ground by a special colour. Finally in 1906 was published Schliz's article on the connexion between the loess deposits of Central Europe and the neolithic population (*Zeit. für Ethn.* 1906, xxxviii, 335 ff, map). My object was to combine Schliz's geographical method of approach with Abercromby's facts and see what came of it. In all this I had the advantage of endless talks with Mr Harold Peake, who first suggested to me that I should work on these lines, and write the paper referred to by Mr Randall. Mr Peake is thus responsible (in a general way) for the initiation of work which might never have been undertaken without his encouragement. Other debts have been already acknowledged elsewhere ; but I must not conclude this historical explanation without mentioning the pioneer of ' vegetation-restoration ', Dr Williams-Freeman. His book *Field Archaeology as illustrated by Hampshire*, and its map, did not actually appear till 1915 ; but during the preceding five years we

had discussed the desirability of restoring primitive vegetation upon the basis of soil-distribution. The influence of Professor Myres upon all human geographers of the pre-war generation was widely felt and has had far-reaching results. The Ordnance Survey Maps of Roman Britain and of Neolithic Wessex are the latest examples of the geographical treatment of archaeological materials ; and there are others in the making.—O.G.S.C.]

Mr Crawford has always followed the method that he originated. Quite recently he has endeavoured to discover the historical meaning of the Grim's Ditches of the Chilterns by methods archaeological, and to restore the somewhat shaken authority of earlier entries in the Anglo-Saxon Chronicle by showing that they are consistent with the facts of contemporary topography. (Mr E. T. Leeds on the other hand, arguing against the authenticity of the same entries and in favour of a West Saxon invasion by the route of the Icknield Way, uses precisely the same method).[3] The demonstration of the existence and destruction of the Celtic System of agriculture in *Air Survey and Archaeology* (1924 ; 2nd edition, 1928), is a matter of first-rate importance in the historical interpretation of the English conquest. Above all he has proved that in air-survey the archaeologist has been provided with a new weapon of almost limitless possibilities for the recovery of lost historical facts from the face of the country. The restoration of the Celtic fields, the recovery of the Stonehenge avenue, the finding of Woodhenge, the revelation of the street plan of Venta Icenorum are merely forcible examples of a method that will recreate whole chapters of our history, and perhaps more than double the number of our known archaeological sites. Maitland spoke more truly than he could possibly have imagined when he called the map of England ' that marvellous palimpsest '.

Dr Fox's method is essentially the same. In his *Archaeology of the Cambridge Region* (1923), with its series of maps, all upon a uniform scale and all showing the physical features with the sites of the different ages plotted upon them, he exemplifies the method in meticulous detail applied to a selected area. In the *Personality of Britain* (1932), he has extended it to cover the whole country, with an insight and a wealth of illustration that should make a pamphlet of less than 100 pages a

[3] ' The West Saxon Invasion and the Icknield Way '. *History*, July 1925, x, 97 ; ' The Early Saxon Penetration of the Upper Thames Area '. *Antiquaries Journal*, July 1933, xiii, 229.

landmark in the progress of historical study. The antiquary, the geographer, and the historian will all neglect it at their peril, for in it their several contributions to knowledge meet together and present the complex picture of the personality of Britain.[4]

'Man is a devil to fight'. However distressing the fact may be to a pacifist, history's first excursion into the open air is to visit the battlefields. The first historian to use maps and to study ground was the military historian, and a history innocent of all other maps will usually include some kind of plan of a battle. Geography was not a very strong point with Macaulay, but with his keen eye for detail he saw the necessity of visiting the sites of all his battles, and every competent historian since, however unmilitary his outlook, has also realized this. The same is true of local history. Every place of battle cherishes the memory of that one past day when it ceased to be local and became part of the universal, when something happened *there* which wrote the name of a sleepy hamlet upon the pages of general history. No protest against the erection of electric pylons was more spirited than that which forbade their crossing the Edge of Flodden.

Even a minor engagement is a joy to a topographical writer. On 29 June 1644, there was a small affair at Cropredy Bridge on the Cherwell between the Parliamentarians under Waller and the King. It was indecisive and can hardly rank as a battle, but the 'Highways and Byways' volume on *Oxford and the Cotswolds* devotes four pages to it. For Cropredy Bridge that day was the day of days. Then and then only did it emerge from its eternal quiet and become part of English history, and for ever the memory of that day is the centre of the story of Cropredy Bridge.

In our land there is one such site that ranks above all others. It matters not whether we adopt the traditional name of Hastings, where the battle was not fought, or Freeman's quite justifiable suggestion of Senlac; in the Middle Ages it was the Place of Battle. It is quite possible that the precise site had no distinctive name before 14 October 1066. But in its emphasis the medieval tradition is right. In any list of the decisive battles of the world, Hastings will always be one. The only other battle-site on English soil that can approach it in importance is Ethandune, and that has no commemorative abbey.

Upon the value, as distinct from the decisive importance of

[4] This little sketch is selective, not exhaustive. Any complete account of the matter would mention the names, among others, of Dr J. P. Williams-Freeman, Professor H. J. Fleure, Mr Harold Peake, and Dr R. E. Mortimer Wheeler.

Hastings, historians will always disagree. To many it marks the re-entry of England into the main stream of European civilization, characterized by the castle, the abbey, and the full tide of feudalism. To others the benefits are not so apparent. They do not consider it self-evident that the brutality of Odo of Bayeux was better than the brutality of Stigand ; or that the anarchy of Stephen was a superior anarchy to that of Ethelred the Redeless ; or that the obstinacy of Thomas of Canterbury was a more civilized obstinacy than the obstinacy of Dunstan of Glastonbury ; or that the barbaric coinage of Henry I was more beautiful than the silver penny of the Confessor. But there is one episode of Hastings that no Englishman can ever forget—the last stand of Harold's bodyguard. When the day was lost and the king was dead, those splendid housecarls yielded not a yard. There they stood and there they fell to the last man in the lengthening shadows of that October afternoon, ringed round the body of their fallen leader, ' with all their wounds in front ', striking their last blows for England at England's own Thermopylae.

It is evident that upon the disposition of a battle and the plan of a campaign the influence of topography is paramount. The great achievement of the modern school of geographical antiquaries and historians has been to demonstrate that it is hardly less potent in the peaceful activities of mankind.

In spite of insular pride and national sentiment we must admit that for the greater part of its history, and for all its prehistory, Britain was upon the outer edge of civilization. She was a poor relation to be treated with becoming condescension mingled with curiosity. None of the distinctive inventions that mark the periods of culture originated here. They arrived in the baggage of conquerors or the packs of traders and afterwards developed local peculiarities, but this was not the land of their invention. Not until the opening of the Atlantic and the growth of ocean sea power did England attain to a position among the leaders. Her great contributions to civilization are modern and medieval. The common law, parliamentary government, the great literature, the scientific discoveries, the basic inventions, the world-wide trade, the high finance, the imperial destiny : all these things belong to the last eight centuries. Before the birth of the Common Law in 1166, the world owned nothing that was distinctively English.

Yet the land has always been attractive, and colonists have braved dangers and difficulties to find it. Its history has been governed by its accessibility. The geologists had long discovered that all the primary

rocks were confined to the north and west. The whole of Scotland and Ireland, the Pennine Chain and its outliers, the mountains of Wales and the moors of Devon and Cornwall, are, speaking broadly, all composed of the oldest rocks. They are also regions of high elevation and high rainfall and form a great highland zone. To the south and east the elevation and rainfall are lower. Downs and wolds replace mountains and moors in a lowland region of valley and plain. Haverfield first seized the historical significance of the geological structure. Dealing with the Roman period he proved that the lowland zone was the region of Roman civil occupation, of the country town and the villa. In the highland zone the occupation was exclusively military. Villas were absent and towns were superseded by forts. The fringe of highland forts, where the army was concentrated, formed a protective ring round the civil province in the lowlands.

Dr Fox has shown that the division into highland and lowland is fundamental, and has guided the movements and divisions not only of Roman but of other historical and of all prehistoric times. It is much more than a mere distinction between highland and lowland. Geologists have proved that a large part of the English Channel and the western zone of the North Sea are the drowned valleys of rivers. Our present coastline is the result of earth movements of no distant geological date, so much so that it is quite possible that the land-bridge now represented by the Straits of Dover was not broken through until the Neolithic period. The result is that the original tributaries of forgotten rivers flow down to the English Channel and the North Sea on both sides. The entry into the country from the continent is therefore easy and inviting, because it is merely a voyage down a slow river on the one side and up a slow river on the other, with a short sea passage between. The 'tightness' of the 'little island' can be greatly exaggerated: it is more accurate to call it a semi-detached portion of Europe.

The lowlands look to the lowlands; the highlands look to the ocean. That is the central fact of English geography. To appreciate its importance it is only necessary to imagine the converse. If the highlands had faced Europe, and the lowlands the Atlantic, no stage of our story would have been the same. We should have been isolated as Ireland was isolated.

The most brilliant and far-reaching generalization in Dr Fox's paper is this: 'In the lowland of Britain new cultures of continental origin tend to be *imposed* on the earlier or aboriginal culture. In the

highland, on the other hand, they tend to be *absorbed* by the older culture. Viewed in another aspect, in the lowland you get *replacement*, in the highland *fusion* '. Dr Fox illustrates the theorem from prehistory, but examples will at once occur to the historian. Rome's legacy of Christianity was absorbed in the highland zone to reappear in history as the Celtic church ; the Norman culture was imposed on the lowlands by force of arms. The last instance nevertheless warns us of the necessity to register the exceptions to every historical generalization. Dr Fox is careful to say that invading cultures *tend* to be imposed on the lowlands, not that they are always imposed. The Norman culture was imposed for a time, it disappeared in the resurgence of Englishry, but in the process large portions of it were absorbed.

To this theorem, as to all others of the same kind, there is the one inevitable exception—the Anglo-Saxon conquest. Recent research in archaeology and philology only make more vivid the picture drawn by the historians of the great gap in our story. Mr Crawford has demonstrated the clean sweep made by the invaders of the Celtic system of agriculture after an existence of 1000 years. The Roman culture was truly imposed on the lowlands. The Celtic villages and agriculture were preserved as the bases of the economy of the province ; the Roman culture imposed itself by the mere weight of its own merit. But the English invader changed all things and made most things new. Valley villages replaced upland centres, new fields farmed on different methods replaced the older ones which reverted to waste, boundaries were drawn through old centres of population. Only in exceptional cases does an English village stand on the site of a Celtic one. The place-names tell the same tale. The thorough work of the English Place-Name Society proves with increasing emphasis that Celtic names are of extreme rarity in the districts settled by the English. This is most striking in counties like Devon, Worcestershire and Yorkshire, where Celtic survivals might have been expected. The English culture was not imposed or absorbed ; it replaced and exterminated, and broke the continuity as it had never been broken before.

Fleure and Whitehouse in 1917 attempted to generalize facts of this nature into the formula of ' the valleyward movement of population '. It was argued that from Neolithic times onward human settlement had moved steadily downhill. There are many cogent arguments in favour of the theory that cannot be set out here. It was not supposed that Neolithic man actually preferred the windy bleakness of moor and down to the snug shelter of a lowland home, but that

until man had invented efficient tools of bronze and iron it was beyond his power to master the forests. Recent research has proved that the generalization was stated too widely. There were always significant exceptions, such as the Lake Village of Glastonbury belonging to the La Tène period of the Early Iron Age. Where man has built his home in the waters of a lake at about sea level, the valleyward movement is complete because it can go no further.

The exceptions multiplied. It was shown that Bronze Age settlements favoured a valley site, or at least a spring-line site, whenever the conditions were suitable. The map of the Bronze Age sites compiled by Dr Fox and Miss Chitty showed a high density of occupation along the whole length of the Thames valley. Then it appeared that the great hill-top forts and the Celtic agriculture associated with them belonged to the Early Iron Age. The most intense occupation of the uplands did not take place in the earlier times but in the time immediately preceding the historic period, and lasted well into it. The real fact is that the choice of habitation-sites was determined by soil conditions more than by elevation. Early man was compelled to live on a light and porous soil wherever he could find it. His greatest obstacle was the thick damp oakwood forests that grew on the heavy clays. These soils proved in the end to be the richest and most attractive, but their conquest demanded tools of iron and effort persistent and long-continued.

Further light has been thrown on the problem by researches into past climates. Our climate was probably always worth a grumble, but at some periods it was worse than at others. The present idea is that during the Bronze Age it was warmer and drier than at present (' Sub-boreal time '). These conditions would have restricted the growth of forest, and especially of forest of the difficult damp oakwood type, and therefore have encouraged lowland settlement. The lessened rainfall would also have made it difficult if not impossible to cultivate the light soils of the chalk uplands. Approximately at the beginning of the Early Iron Age (700–600 B.C.) these conditions were succeeded by a moister and colder climate ('Sub-Atlantic time'), and the oncoming of this climate was coincident with the great extension of the upland cultivation. The upland cultivation or Celtic agriculture lasted for about a millennium and was brought to an end with comparative suddenness by a people of the forest clearings—the English. It was not a movement, but a replacement ; the invaders made their new homes in the valleys, and the old villages and the fields associated with them became as though they had never been.

' Transportation is civilization ', and if history is to be taken out into the open air she must move along the roadways. Historians, except those who ignored the Roman period of set purpose, have always realized the importance of the Roman roads. It has not always been recognized that movement is essential at all periods for trade and warfare, and that every period has its own distinctive system of communications. An upland society will have upland roads and a valley society will have lowland roads. Of the trackways of the neolithic and bronze periods we know nothing and can infer little. When we reach the upland civilization of the Early Iron Age we are on more certain ground. The ridgeways and harrow-ways that connected the hill-top forts and the Celtic villages formed a system of communications, the excellence of which we are only now beginning to appreciate. We are so accustomed to taking the low road that we imagine the high road to be a matter of constant climbs and impossible gradients. It is true that if a ridgeway has to cross a valley it performs the feat ' on its head ', but this is an exceptional circumstance. The home of the ridgeway is a plateau country as distinct from a true mountain land. When the ridgeways are studied in relation to the settlements they connected, they are found to provide ways that are rational and easy. Dr Fox and Mr D. W. Phillips have some admirable remarks on the subject buried in a footnote to their report on the Survey of Offa's Dyke,[5] and of the short dykes that preceded it. We may disinter a few sentences.

> ' The examination of these Short Dykes suggests that the ancient trackways of Wales deserve to be mapped and studied with far more care than they have yet received. Moving along those controlled by the Mercians in the eighth century, one is conscious that there existed, in the mountain complex of which the area examined formed part, a complete system of intercommunication almost entirely unrelated to that existing today. The alignments of this system are determined by the watersheds. The ways are essentially ridgeways, refusing, except under stress of absolute necessity, to cross any stream. . . . The comparative ease of movement on these naturally well-drained crest lines is enhanced by the absence of marked changes in level. For seven miles the Kerry ridgeway, passing through very broken country, does not change level through more than 100 feet, and this only by gentle gradients.
>
> ' The inhabitants of Wales were thus provided, by conforming to geographical conditions, with routes which afforded good going and which for the most part were easy to follow. . . . Thus we may conceive of human activity in early times proceeding along levels 500 to 1000 feet above those that we use today in the same areas '.

[5] *Archaeologia Cambrensis*, June 1931, LXXXVI, 1–74.

The subject of early roads is too large and intricate to be pursued further on this occasion. It must suffice to say that they fall into two perfectly distinct classes. First are the ridgeways, with their modification or development, the harrow-ways. The latter are upland roads that do not cling so closely to the water partings as the true ridgeways, and do not show quite the same reluctance to cross streams. In a different category are the hillside roads, perhaps better called the spring-line ways. They are difficult to date with any certainty but it is possible that some of them may go back even to the Bronze Age. The Icknield Way and the Pilgrim's Way are well-known examples. An anomalous third class is the hollow-ways. They are generally short sections of track leading from the upland to the valley, but through roads of the other types develop into hollow-ways when they pass down slopes.

It is a commonplace of criticism that the historians of the greatest maritime power of modern times have shown little interest in sea power or appreciation of its conditions. Naval history has been relegated to specialists instead of being treated as the foundation of national existence. It is hardly too much to say that an American historian first explained this vital phase of our history to ourselves. If the high seas have been neglected, the inland waterways have been ignored. The first and the best untechnical account of the matter is contained in the opening pages of Mr Hilaire Belloc's *Historic Thames*. ' England ', he says, ' has been built up upon the framework of her rivers '. This is true of some periods rather than of all, but it is certainly true of the civilization built up by the English and the Danes. The principle should be limited to the slow-flowing rivers of the lowlands, because it is exceptional for the rivers of the highland zone to be navigable beyond the tidal reaches. The essential conditions are high tides, low watersheds, and slow-flowing rivers.

In the lands that border the Mediterranean Sea the tides are negligible and no help to navigation, but England feels the full force of the ocean tides and their effect is heightened by their being caught in narrowing channels like the English Channel, St. George's Channel, and the Severn Sea. The most spectacular phenomena are the Bore of the Severn and the Eagre of the Trent, but it is not only in those rivers that the tide makes ' a silence in the hills '. The silence in the hills admits the noise of the ships.

' There are few things more instructive when one is engaged upon the history of England than to take a map and mark upon it the head of each navigable piece of water and the head of its tideway, for when

this has been done all England, with the exception of the Welsh Hills and the Pennines, seems to be penetrated by the influence of the sea '.[6]

There may be few things more instructive but how many historians have ever done it, or if so have allowed it to influence their historical outlook ? The lowlands of England are a well worn landscape partly sunken. Therefore the high tides flow far up the gently graded entrance-channels, and from the heads of the tideways boats of shallow draught can nose their way up the slow streams to within a short distance of their sources. Not only so, but the tributary rivers form great fans of waterways penetrating most parts of the country. Again, the watersheds are low and easy to pass, and the land porterage from one waterway to another is never long. The Thames is navigable at least to Lechlade and before the digging of the canals it was navigable to Cricklade. From these points the journey over the Cotswold country to the Severn on either of the Avons would be a matter of two or three days even for fairly heavy loads. It is sometimes made a matter of wonder how goods were transported along foundrous medieval roads in cumbersome medieval carts. The answer is that for the most part they went by water.

A small amount of delving into the records will prove this to the hilt. If the accounts of the building of a castle or an abbey can be found, it will generally appear that, unless local materials were very accessible, the stone and the timber came by water. The distribution of the Caen stone from Normandy is most instructive. It ' was used all over the South and East of England, in the Tower of London, in the freestone of the Norfolk towers, in Eton College in the fifteenth century, in Henry VII's Chapel at Westminster, and in Buckingham Palace some centuries later '.[7]

In the seventeenth century Inigo Jones introduced Portland stone into the capital. He and his successors used it for the Banqueting Hall of Whitehall Palace, the new St. Paul's Cathedral, Somerset House, the British Museum, and some of the Government offices. The quality of the stone is excellent but the vital factor was the cheapness of the water transport. The quarries are on the sea coast.

The matter is charmingly set forth in one of Walter Bagehot's shorter essays entitled ' Boscastle '.[8] The insight of the great economist, who could unravel the intricacies of the money market, did not fail when he considered the significance of these tiny havens, of which

[6] Belloc, *op. cit.*, 3. [7] Wickham, *The Villages of England*, 35.

[8] Bagehot, *Collected Works*, IV, 334.

Boscastle is one among hundreds. They were the nerve centres of their little countrysides, because through them alone could the countryside obtain the things that it needed but could not make. ' The sea ' (and we may add, the river) ' was the railway of those days '.

The railway was the basic invention of the nineteenth century, but in the early stages of the industrial revolution the railway had not been invented. Its immediate predecessor was the canal. But the canal was no new invention in the sense that the railway was a new invention. It was merely a development of a basic system of transport stretching back beyond the confines of our written history. It was likely that it went back far into prehistory. The Avenue of Stonehenge went down to the Avon and the blue stones of Stonehenge came from the Prescelly Hills in Pembrokeshire. They could only have come by sea and river. Dr Fox's map of the Bronze Age sites shows a continuous mass along the whole length of the Thames valley. Quite an appreciable number of ' finds ' have been dredged from the river bed itself. It seems impossible to resist the conclusion that the Thames was a highway of traffic in the Bronze Age, and that water transport was used extensively in the megalithic period. ' England has been built up upon the foundation of her rivers '.

The most striking, if not the most important, results of the open air study of history have been achieved in the periods before written records existed, or when they were few. Many examples could be cited. Sir Charles Oman's attempt to provide a definite historical stage for the Wansdyke is a good one. So is Mr Crawford's effort to connect the Cloven Way with the invasion of Cerdic already mentioned. We propose, however, to add a few remarks upon Dr Fox's studies of the Dykes.

Dr Fox began the study with the Cambridgeshire dykes in *The Archaeology of the Cambridge Region* (1923) and continued it in an utterly different environment with Offa's Dyke in the Marches of Wales. Pitt-Rivers began the investigation of these visible and defensive frontiers with Bokerly Dyke and Wansdyke. He proved that they could not have been constructed earlier than the very end of the Roman occupation, and were probably later. All later investigation has confirmed his conclusion. Where any definite evidence of date is available, all the dykes have been shown to belong to the Dark Ages. Any suggestions of a prehistoric origin or of ' Belgic Ditches ' must be definitely abandoned. This positive conclusion of archaeology is supported by historical reasoning. A visible frontier is of particular

utility to a higher civilization in uncomfortable contact with a lower. It says clearly to the undesirables and the outlanders—' You are not wanted, thus far shalt thou go and no further '. These conditions obtained in varying circumstances and at different times throughout the Dark Ages. And the origin of the idea is clear. These people had before their eyes the remnants of a civilization far higher than their own which had treated a like problem in a similar manner but with greater efficiency. The dykes of the Dark Ages are the echoes of Hadrian's Wall and the German *Limes*.

Of the interest and fascination of the study of these defensive frontiers there is no doubt. As Dr Fox says :[9]

> ' The special fascination which the linear earthwork has for the field worker is here revealed. The survey of a work of this class vividly brings home to the student a forgotten England : an island mainly covered by forest, whose valleys were swamps in which the rivers followed devious and changing courses. Belts of gravel by streams and rivers, sandy heaths, chalk down-lands, limestone ridges, and, in the West and North, the ancient rocks which form the mountainous backbone of the country, were either open or sparsely forested and suitable in great measure for man's dwelling-places, his primitive agriculture, his traffic, and the sustenance of his flocks and herds. Human activity in southern Britain was thus, geographically speaking, strictly limited, and movement was canalized —restricted for the most part to definite routes, the position and extent of which were determined by the geological structure of the country '.

The most valuable results of the survey of Offa's Dyke were those least expected. It was proved that the line of the work must have been settled by a negotiated treaty, that its lay-out must have been the work of a single mind, that its construction was skilful and adaptable, and that the openings through it were carefully selected and closely guarded. But the insight of Dr Fox produced conclusions far more interesting than these.

He observed, especially in Montgomeryshire, where the dyke definitely enters the upland country, that its alignment was of two types distributed with apparent irregularity. In the first type the alignment of the earthwork was demonstrably straight between two points visible from one another. In the second type the lay-out did not diverge in a marked manner from the straight line but the actual course was sinuous. The explanation of the first type was clear. The country was open when the dyke was made, and the drawing of a straight line presented no difficulty. But what of the second, the sinuous, portion ? The suggested explanation is that the dyke was here

[9] ANTIQUITY, June 1929, III, 138.

driven through forest and jungle. The engineer laid out his straight line even in the forest, but when the gangs came to dig it out the frailties of human nature prevailed. They avoided the thickest clumps, and went round the largest trees instead of felling them.

The consequences of this deduction are far-reaching. In an age and a country from which we have no contemporary local record of any kind, we can define precisely the limits of the forest and the sown. In this way we can formulate conclusions as to the economic conditions of the Mercian borderland in the eighth century that could be drawn in no other way.

From a more southerly section of the dyke can be drawn an inference no less informative. Dr Fox proved (in correction of previous observers) that the moment it touched the richest agricultural land of the Herefordshire plain it disappeared completely, except for a few isolated stretches. Here was an anomaly indeed, but a convincing theory was forthcoming to solve it. Geological structure supplied the clue. The dyke disappeared at the very point where it touched the outcrop of the Old Red Sandstone. There is abundant evidence, physical and historical, that the Old Red Sandstone under natural conditions carried a forest growth of exceptional density. Therefore the conclusion is that all that smiling land of laden orchards and white-faced cattle was untouched forest in the eighth century. The short intermittent sections of dyke mark the only points at which settlement had occurred. The rest was impenetrable jungle and no dyke was made through it because none was necessary. A visible frontier is not required where there is no man to see it. Here again is an historical fact of the utmost importance that history can only observe when she has been taken out into the open air.

The portions of the dyke in the lower Wye give rise to a more beautiful piece of historical inference. From a point above Hereford to Redbrook the great river was itself the boundary. At this point the dyke recommences and climbs to the edge of the high plateau on the left or English bank of the river. There, along one of the most magnificent pieces of scenery in the country—' a plateau edge overlooking a swift river in a winding gorge, a gorge which is narrow, precipitously flanked, and in places 600 feet deep '—ran the great frontier to its termination at Sedbury cliffs on the banks of the tidal Severn. Whatever may have influenced King Offa in choosing this line, we may be certain that obtaining a glorious view, even over Wales, was not the paramount consideration in his mind. The inference drawn

by Dr Fox is that here again we have evidence of a negotiated treaty ; evidence written plainly on the face of the countryside. The dyke starts the last lap of its southward journey just above Redbrook. Redbrook is the highest point on the river which the exceptional tides of this estuary ever reach. The main clue to the line of the dyke in this portion is therefore that it was designed to leave the tidal water on both banks in the hands of the Welsh. The Welsh were established there, and Offa wisely decided to secure peace by leaving the timber trade and the salmon fishing in their hands. Records attest the importance of the timber trade in the Middle Ages, and even now Tidenham Chase is being exploited by the Forestry Commissioners as an annex of the royal and ancient Forest of Dean. As for the fishing, who has not enjoyed Wye salmon as a special treat ? The truth of this explanation is attested not only by the general line of the dyke, but by two marked features. A great loop of the river, although on the English bank, is left in the hands of the Welsh, and the dyke is carried across the neck of the loop. This contained the hamlet of Lancaut (Landcawet) which was still Welsh at the time of King Edwy's charter to the monks of Bath in 956.[10]

Again, a short distance below Chepstow the dyke suddenly turns away from the river and passes in a straight line to its termination on Sedbury cliffs. The effect of this was to leave the mouth of the river and the peninsula of Beachley on the Welsh side of the dyke. Beachley still contained a hamlet of Welsh sailors, then paying rent, in the time of King Edwy ; and, more remarkable still, it had a Welsh lord right through the Middle Ages, when the whole of the sea-plain of South Wales was strongly held by the Normans and their successors. So here we have complete evidence of a seaport and a fishery deliberately left in the possession of its immemorial holders.

Nevertheless, subject to one exception. The Roman road from Glevum (Gloucester) to Venta Silurum (Caerwent) crossed the Wye by a bridge, the piles of which are still in the river bed, at Tutshill just above Chepstow. The bridge may or may not have survived to the time of Offa, but the crossing certainly did. At this point there is a gap in the frontier and no dyke or natural obstacle exists on the English side, but the dyke on both sides of the gap does down to the river bank. The purpose of this arrangement is plain. Offa was quite willing to leave the trade and the fishery in the hands of their Welsh holders,

[10] Seebohm, *English Village Community*, 149.

but a bridge-head on a through route was another matter. The soldier intervened and said that while trade and fishing could remain free, he and he alone must hold the passage of the river.

This must end our examples and our discussion. No true history can be written without documents ; they are the life-blood of the study. As Lord Acton explained so clearly, history became scientific as it passed from the age of the chronicles to the age of the documents. But there is one document that no historian can neglect except at grave peril, and that is the face of the country. It is not easy to read ; to many it conveys neither message nor meaning. The man who would read it must own the tools of the trade. He must have assimilated the main facts of stratigraphical geology and be able to apply them. He must know the principles of transport by water and by land, and what forms of movement are natural and easy, and what are distasteful and difficult. He must know the principles of strategy and tactics, and the conditions that govern the movements of bodies of men. He must have an eye for a military position, and an eye for a commercial position. He must know where and how men lived at different levels of civilization, the conditions that attracted them and the reasons therefor. Above all he must be able to read a map, to appreciate what is significant in geographical control, to have an eye for country and a feeling for landscape. He must love the high places of the earth and have felt ' the tangle of the isles '. And he must remember that this knowledge can be gained in one way and one way only—by tramping the country on his own feet.

But the matter has a still deeper significance. The English people are a people of the open air. From the time of their first landing they avoided towns and sought open villages. The real English stock has never taken kindly to towns, even when circumstances have forced urban life upon it. The Mediterranean type of town has never become acclimatized here. Even now the ideal of English town-planning is the garden-city—a town that is made to look as little like a town and as much like a bit of the country as it possibly can. So the conclusion is plain. The true life of England is a life of the great spaces and the open air, and the historian who would portray that life rightly must be a man of the open air.

Aspects of the Neolithic and Chalcolithic Periods in Western Europe

By Jacquetta Hawkes

OF all the prehistoric periods yet distinguished in Western Europe the Neolithic has suffered the hardest fate. Having in the past enjoyed a seemingly secure and important position in the field of prehistory, with an estimated duration of several thousand years, this unfortunate period has of late been so assailed before and behind that its very existence has been called in question. In Britain, however, recent researches seem to have rescued our Neolithic from complete extinction by the encroaching Mesolithic and Bronze Ages, and given it an established position once more, albeit a more humble one than it occupied in its days of undue inflation. Because it has become better understood, an epoch to which formerly thousands of years were allocated is now limited to hundreds.

Very recently Mr Stuart Piggott has published a careful analysis of British 'Neolithic' pottery,[1] which has done much to give solidarity and meaning to the period as a whole. Plainly, however, the British evidence cannot be fully understood without consideration of continental origins and relationships. For the Windmill Hill culture of Britain, so clearly defined by Mr Piggott, this consideration is made difficult by a lack of scientific work in important areas of France and elsewhere. The difficulty was made evident in the companion paper to Mr Piggott's, where Professor Childe[2] discussed certain groups of supposedly neolithic continental pottery and their affinities with Windmill Hill: it is the aim of the present paper to supplement some aspects of his work.

Professor Childe dealt particularly with the three groups of Michelsberg, Chassey and Breton pottery, all members, like the

[1] *Archaeological Journal*, 1931, LXXXVIII, 67–159.

[2] Ibid. 37–66.

Windmill Hill ware, of the great Western family first shown by Schuchhardt to owe its individual character to a derivation from leather prototypes. These three groups, while showing a family likeness, each possess distinctive features which are the natural results of divergent specialization. The fact that Windmill Hill pottery is without these features suggests to Professor Childe that the British culture split early from the Western stem. This is perfectly in accordance with the evidence from Mr Keiller's classic section at Windmill Hill itself. Here Mr Piggott has been able to expound the division of the Neolithic into two phases : that from the lowest levels, characterized by pottery confined almost entirely to his simple forms A, B and C, he calls Windmill Hill A 1, while the upper levels where the pottery shows greater sophistication of form, with carination and thickened rim, represents his A 2. This morphological development must have covered a considerable period, and a sterile layer indicates a further lapse of time before the first appearance of Peterborough and Beaker ware, which can be dated soon after 2000 B.C. An early dating for the introduction of the Windmill Hill culture into Britain is therefore made probable by the evidence from the type station. Thus it would appear that Professor Childe may have made his survey at too late a period of the continental development to find the closest analogies to Windmill Hill. The present writer believes that if an earlier one be made, it reveals a 'Western' culture in which little specialization has taken place, a culture which shows much closer affinities with the earliest Windmill Hill of this country. Let us then cast further back to see what possibilities there are to be considered in an attempt to trace the ancestry of the cultures Professor Childe has discussed.

The Western Mesolithic cultures, in particular the Tardenoisian, plainly look backward to the palaeolithic rather than forward to the neolithic : but it has been claimed that the early neolithic 'pick' culture of northwest Europe, in which Tardenoisian survivals can be traced, played an important part in the production of the Western Neolithic. This supposition throws a heavy responsibility upon the slender and elusive Campignian culture of North France and Belgium, a responsibility which it is in no way able to bear. It has been proved by Schwantes[3] that the classical French sites for this culture are no earlier than the Chassey period, while the early date of the 'Alt-Campignien' of Belgium has been discredited by Van Giffen[4]. It is

[3] *Germania*, XVI, 177–85. [4] See references quoted in ibid.

indeed clear that the Campignian should be regarded merely as a late and poor extension of the Forest Cultures of the Baltic area, incapable of giving rise unaided to any of the cultural innovations of the Western Neolithic. Plainly these elements must ultimately derive from the Near East, although undergoing development and change in the West. The old story of the diffusion of neolithic culture from the eastern Mediterranean by a moving race of megalith builders has long been discredited. Not only are megaliths proved to be associated with entirely different culture-traits in different geographical areas, but also the dolmen, generally regarded as the basic form, is now found to be absent in many areas where its presence is essential to the credibility of the old theory. Moreover in the Iberian Peninsula, a natural link between East and West, whatever the debated megalithic sequence may be, it is certain that the oldest neolithic culture, the Almerian, is non-megalithic in character. It cannot therefore be held that megaliths are an original feature of the neolithic culture of the West, for this must have been already established before their earliest appearance. Rather we must picture a 'megalithic idea' forming essentially not a culture but a religion, diffusing and becoming superimposed in many differing forms upon a wide variety of cultures.

The Danube corridor forms another possible route for the introduction of the germs of the Western Neolithic, linking, as it does, eastern Europe and ultimately the Aegean with the West, where the Omalian of Belgium marks the furthest extension of the Danubian culture. However, this culture is so highly specialized as to be unmistakable and Professor Childe has been obliged to admit[5] that it cannot be held responsible for many essential 'western' features. Notably the western forms of celt completely exclude the 'shoe-last' variety so typical of the Danubian, while the gourd-like Danubian pottery cannot have given rise to the 'leathery' *Westenkeramik*.

Having dismissed mesolithic survivors, megalith-building voyagers and Danubian peasant colonists, what culture sufficiently early for our purpose remains to be considered? Thanks to the pioneer work of M. Vouga on Lake Neuchâtel, we can now confidently put forward the earliest Neolithic of the West Swiss lake-dwellings. As Professor Childe has pointed out[6], M. Vouga's work gives new meaning to Reinerth's division of Switzerland into an Eastern and a Western culture province; the eastern due to Danubian inspiration, the other now to be considered

[5] *Danube in Prehistory*, 172. [6] *Ibid.* 165–7, 172.

quite distinct and truly western in character. This becomes significant when it is admitted that M. Vouga is surely right in correlating the flooding between Aichbühl I and II in east Switzerland, not with that between his periods I and II on Lake Neuchâtel, as suggested by Reinerth, but rather between his II and III. Thus Vouga's period I will be absolutely earlier than the first appearance of Danubian influence in east Switzerland, probably before 2300 B.C., and contemporary with Danubian I further east. Now Professor Childe has conceded that many elements in what we shall henceforth refer to as Vouga I are of a western facies,[7] notably celts, *petits tranchets* and Emmer wheat, but it appears to the present writer that the pottery, so far from confusing this evidence as he suggests, strongly corroborates it. If FIG. 1, A–B be compared with FIG. 1, C–F, it will be evident that in form the vessels of Vouga I closely resemble the early Windmill Hill examples. Piggott's forms A and B are very prevalent, with or without simple lugs. The shallow bowl with twin lugs and the 'vase biconique' are the only typical shapes without close parallels from Windmill Hill. The paste of this early pottery is like that of the British ware in being well smoothed and containing large grits. Ornamentation is practically non-existent, but small pierced holes below the rim afford another parallel.

Nor is this culture confined to Switzerland. It may be traced over the French border in the lake-dwellings of the Jura. In the material from the site on Lake Chalain the antler sleeves and pendant forms (FIG. 2, D) as well as the pottery (FIG. 2, A–C) seem to prove that this settlement had already commenced during Vouga I, although it probably stagnated until the Bronze Age when, as we shall see (p. 35) applied strip-ware came in from the south. The Jura camp of Montmoret appears, although poorer, to have had a similar history and must have been occupied by the same people.

Further, at the famous but unpublished site of Camp de Chassey (Saone-et-Loire) there is strong evidence for the existence of this same culture at a period preceding that of the decorated ware. Here again can be distinguished a series of pots of Piggott's forms A and B (FIG. 3): they have simple lugs and are of a well smoothed paste containing grits like the earliest lake-dwelling pottery, but contrasting with the decorated forms which are either burnished or sandy in texture and are usually very elaborate, with carination, multipierced lugs, etc. The occurrence of unheeled antler sleeves, rectangular schist and segmented antler pendants, as in Vouga I, gives substance to the ceramic evidence.

[7] *Danube*, 172.

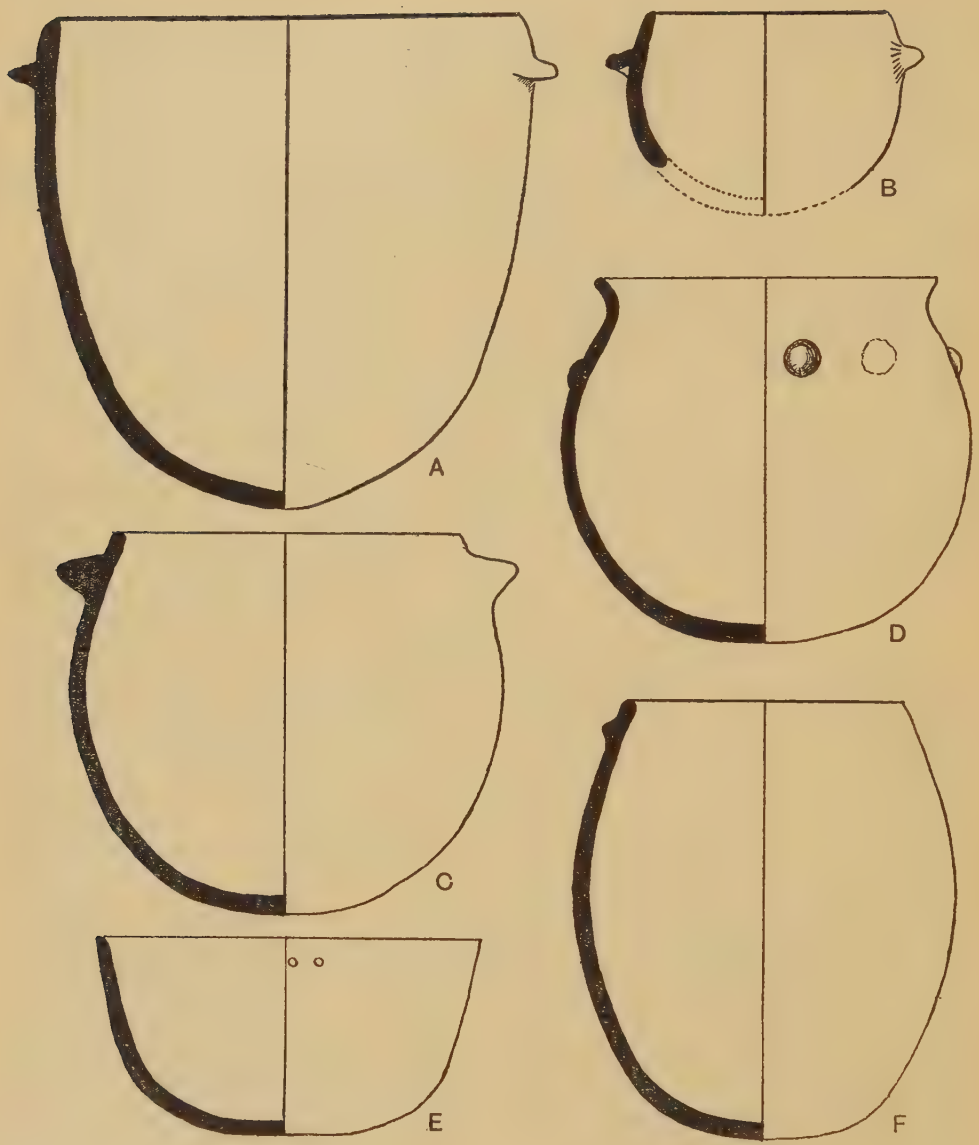

FIG. 1

A, WINDMILL HILL ($\frac{1}{4}$). B, WINDMILL HILL ($\frac{1}{4}$). C–F, NEOLITHIC AT NEUCHÂTEL ($\frac{1}{8}$)

This division of the Camp de Chassey pottery into an earlier plain and a later decorated group seems to find confirmation in the South, where we can now further trace our early western ceramic. Frequent in the material from South French cave-sites is the occurrence of a ware characterized by finely incised designs and multipierced lugs

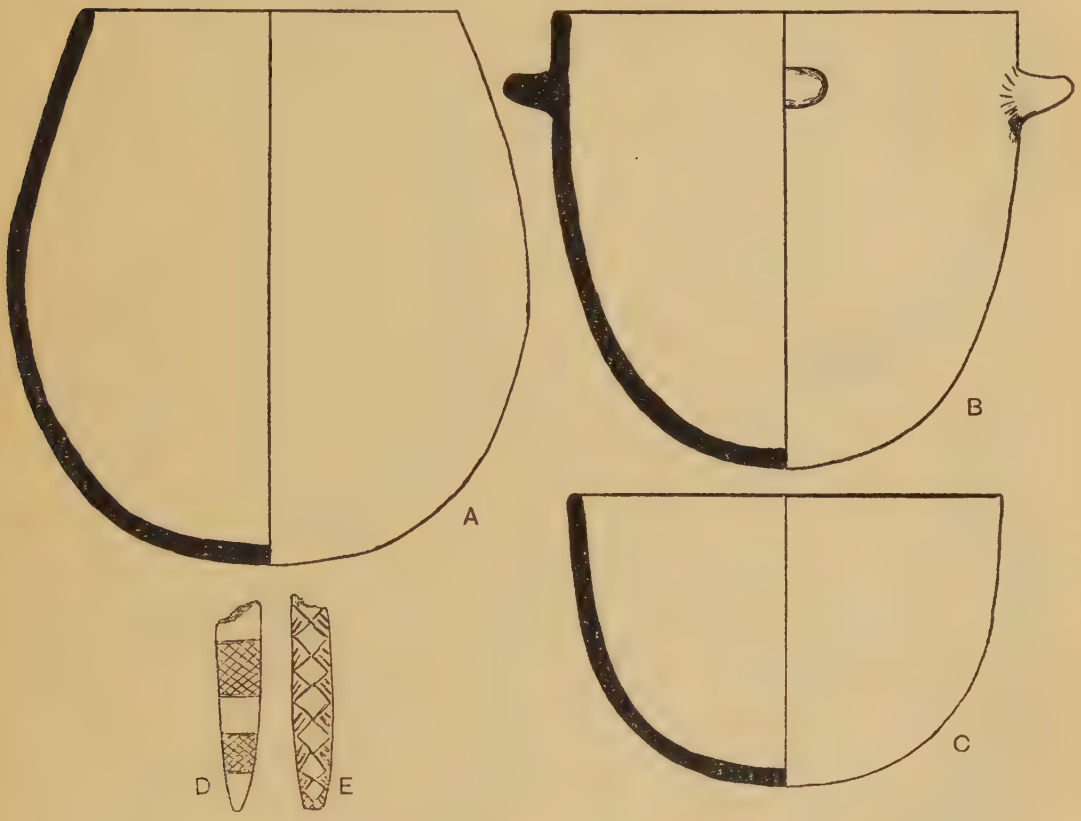

FIG. 2
A–C, LAKE-DWELLING, CHALAIN, JURA ($\frac{1}{2}$). D, PENDANT, NEUCHÂTEL: LOWER NEOLITHIC ($\frac{1}{2}$)
E, PENDANT, CHALAIN ($\frac{1}{2}$)

almost identical with the decorated Chassey; also common is a plain ware with simple lugs. A lack of scientific excavation has hitherto obscured any understanding of a possible significance in this differentiation. Now, however, M. Héléna of Narbonne is excavating the cave habitation

site of Bize (Aude) where this incised ware occurs clearly stratified above a level yielding only unornamented pottery with unelaborated

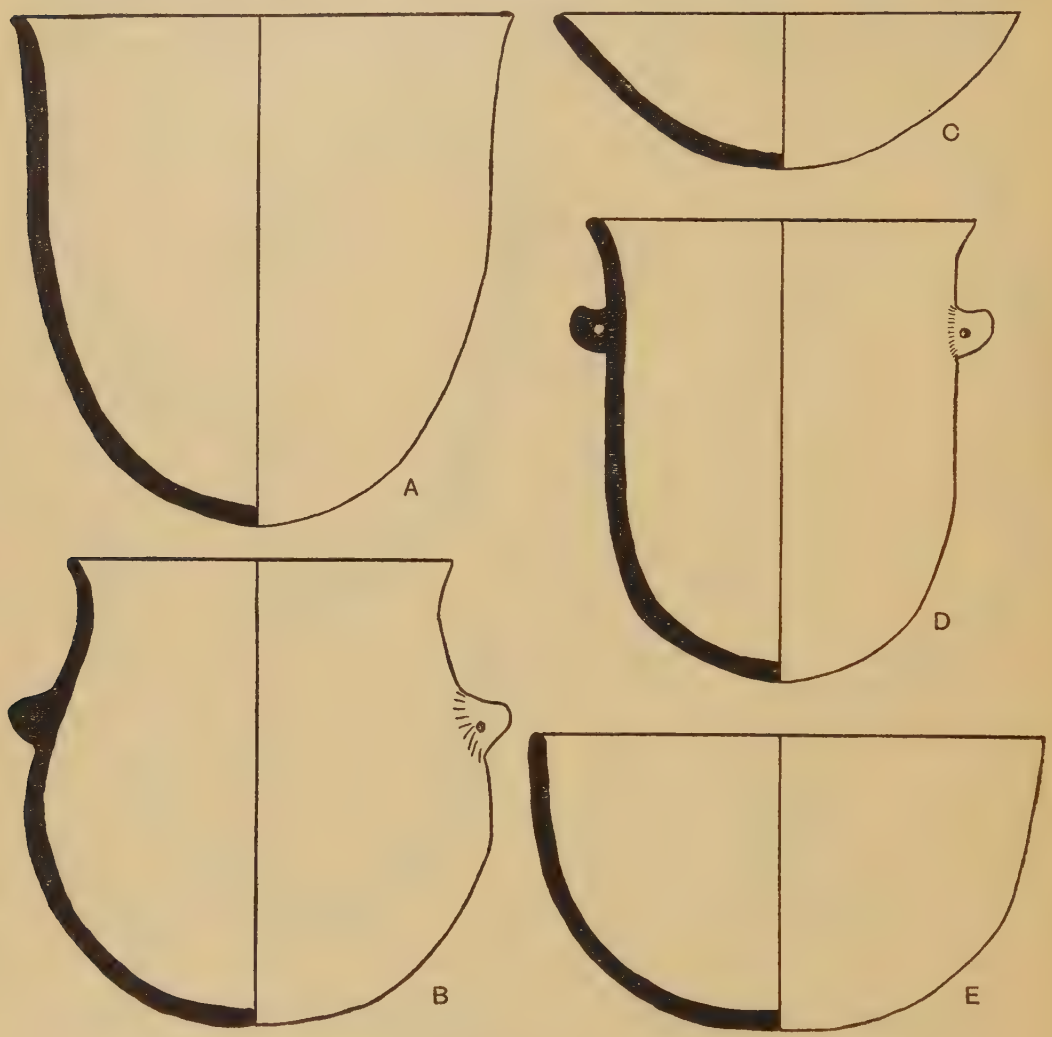

FIG. 3
A–E, FROM CAMP DE CHASSEY, AT AUTUN MUSEUM ($\frac{1}{2}$)

lugs. This level, it is perhaps worth noting, was separated by a sterile layer from the underlying mesolithic, showing that here at least there was no continuity between the two cultures. The material from this

site is as yet insufficient to give a clear idea of the prevailing forms of the plain ceramic, nor with the single exception of a leaf-shaped arrowhead is there anything other than pottery from this horizon. Yet more work may well make possible a classification of the already existing material from the cave-sites, a task which at present would be hazardous. Already there is enough evidence to justify the claim that the culture, as typified by its pottery, which we have recognized in Britain, western Switzerland and the Jura lake-dwellings and seen to have preceded the decorated ware at Camp de Chassey, occurs also in the Midi. Now Professor Childe has already noted that there are many elements in the South French cave-culture which are common to Vouga I in Switzerland.[8] Thus Reinerth's original contention[9] that a Western Culture travelled up the Rhône Valley to the Swiss Lakes may well have incorporated, even while distorting, the historical truth.

What was the further extension of this culture in northwest Europe it is as yet impossible to judge ; it must have spread northward and ultimately come into contact with the southern fringes of the Baltic Forest cultures in North France and Belgium. It is even conceivable that the ill-defined term Campignian may have served to cloak its existence in this area. The early Danubian II period saw the western area cut off from the Forest cultures by the interposition of the ' Bandkeramik ' wedge extending as far as the Omalian of Belgium ; the Western Culture makes its appearance on the Lower Rhine only in a developed form, as the Michelsberg, after the Bandkeramik had already become established there. Concerning the diffusion of the Western Culture to Britain, a study of such material as we have suggests that the earliest Windmill Hill pottery stands closer to that of Vouga I than to the Midi ceramic. This would seem to be evidence against a seaborne diffusion from the South for the British culture. The fact that in the Jura the lake-settlement of Chalain and the Camp of Montmoret were simultaneously inhabited by the same people shows that in this early neolithic, as commonly in subsequent periods, lake-dwellings and camps were but alternative forms of habitation. This consideration strengthens the link connecting the earliest lake-dwellings of the continent and the earliest fortified camps of Britain.

Here then we have attempted to establish the existence of a Western Culture which is both pre-metal and non-megalithic, but which cannot be derived either from the Baltic or from the Danube. Let us now

[8] *Danube*, 172. [9] Reinerth, *Die jüngere Steinzeit der Schweiz*, 18

advance a step and consider the field once more at the period chosen by Professor Childe for his survey, when this early culture had developed into several well differentiated cultural groups retaining only certain elements in common as an ancestral inheritance. We will begin in the north of our area with the relatively well known Michelsberg culture. Professor Childe has shown that this culture has considerable Danubian

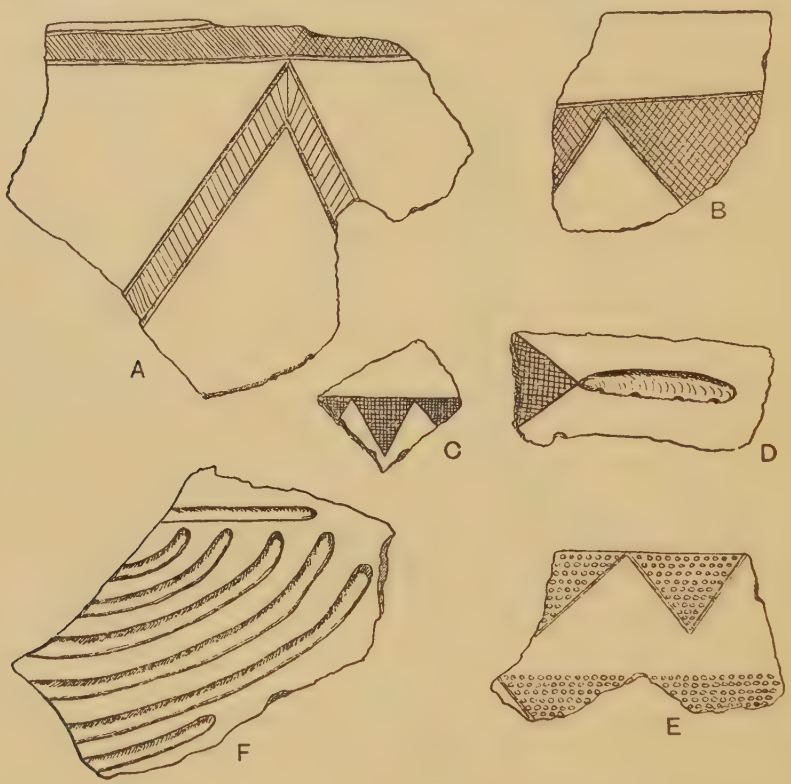

FIG. 4
A, B, E, GROTTE DE BIZE, AUDE (B, E, $\frac{1}{2}$; A, $\frac{1}{4}$)
C, D, GROTTE ST. VÉRÉDÈME, GARD ($\frac{1}{2}$)
F, GROTTE SALPÉTRIE, GARD ($\frac{1}{2}$)

influence and that in time it may confidently be assigned to the III phase of the Danube which it may even have outlasted.[10] In his subsequent paper he stresses the essentially Western character of the Michelsberg,[11] particularly as manifested by the pottery. It seems

[10] *Danube*, 182. [11] *Archaeological Journal*, 1931, LXXXVIII, 37–66.

very probable that this culture with its pile-dwellings and fortified camps, its celts hafted in antler sleeves and its ' leathery ' pottery, was indeed a descendant of our early Western Culture as represented by Vouga I, which, having absorbed Danubian influences and developed specialized forms of its own, spread down the Rhine during the Upper Neolithic and Chalcolithic periods of West Switzerland.

The relationship and approximate contemporaneity of the Michelsberg and ' decorated Chassey ' cultures is easily demonstrable. Chassey incised ornament of the early style occurs on Michelsberg ware from stations on the Upper Rhine, while at Fort Harrouard (Eure-et-Loir) baking-plates of the orthodox Michelsberg type occur from both levels

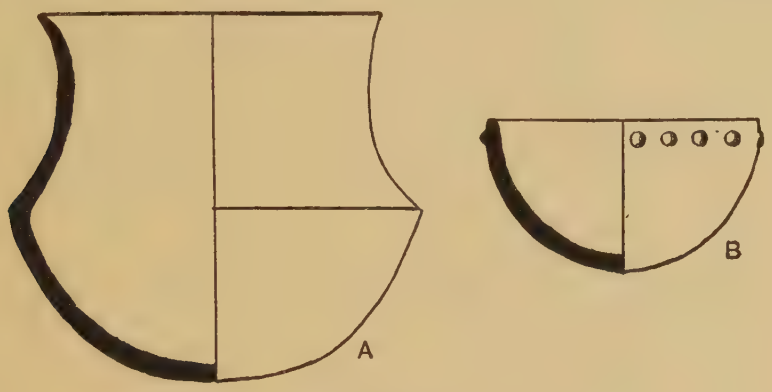

FIG. 5
A, GROTTE ST. VÉRÉDÈME, GARD (½)
B, NÉCROPOLE DE CANTEPERDRIX, GARD (½)

and the pottery forms are very similar.[12] It has already been mentioned (p. 29) that pottery characterized by incised geometric decorations and multipierced lugs occurs at many sites in the South French cave-culture. Decoration, which is invariably geometric, is commonly executed in finely incised lines with interior hatching (FIG. 4, A-D) but sometimes in rows of punctuations (FIG. 4, E). Frequent motifs are triangles, chevrons, and zigzags. These designs may be encrusted in white or red clay, a feature which finds parallels in the Chassey culture notably at Fort Harrouard and Catenoy. Rows of applied knobs are also typical (FIG. 5, I). In general the ornamentations show a remarkably

[12] Abbé Philippe, *Cinq Années de Fouilles au Fort Harrouard*, 127.

close similarity to that of Chassey ware. Long lugs with three or more perforations, flat applied multipierced strips (*flûtes de Pan*) are again identical with Chassey examples. In the pottery forms this resemblance is no less noticeable. Carinated bowls are typical, pottery lids not uncommon, while at the Grotte de Bize M. Héléna has found fragments of a twin cup. Plain vessels, identical in form and paste with the decorated examples, clearly belong to the same class (FIG. 5, 2).

In an attempt to date this pottery in the South of France the evidence from the Grotte de Bize is again invaluable, for here the decorated level was stratified under corded beaker ware. Further information is forthcoming from this same district. A series of careful excavations has enabled M. Héléna to divide the cave-culture of the Aude district into four chronological periods. The decorated ware described above is typical of the first of his divisions, of which the Trou du Loup affords a representative example. At this site the pottery includes a round-bottomed bowl with multipierced lugs and a small carinated vase ornamented with hatched triangles. Other material from this burial-site will here be enumerated as typical of this class.

Flint :

7 tranchet arrow heads
7 tanged and barbed arrow heads
4 leaf-shaped arrow heads
1 broad-edged arrow head of Egyptian type
1 delicate leaf-shaped lance head
Numerous blades

Beads of Serpentine and Callais

Rectangular schist plaques

The three other divisions of M. Héléna's classification may be conveniently enumerated here.

His second period is typified by beakers, and marks the first appearance in the Aude of metal and applied strip finger-tip ware ; the Grotte de Falaise is a representative site. The third phase is a development of the second, the well known *perles à ailettes* can be taken as the type fossil. Bronze is now abundant, as for example at the site of the Grotte du Ruisseau, Les Monges. Typical of the fourth period are arrow heads with long tangs and barbs of Iberian type ; that this phase lasts well into the Iron Age is proved by the occurrence of Hallstatt pottery at some sites and even a fragment of a Hallstatt fibula at Grotte des Escaliers, Armissan. To this period belongs the

developed applied strip-ware and, although the finger-tip form begins in Héléna's period II, Bosch Gimpera's early dating for this ware seems clearly to be at fault.[13] Strong support for this contention comes from the Gard district where, at the Grotte Meyrance, applied strip-ware is found with a bronze dagger and beaded bronze bracelets. This ware penetrated as far as the Jura, occurring abundantly at the lake-dwellings of Chalain and Clairvaux. (See p. 27).

To return to the decorated ware: M. Héléna has never found metal associated with it in the Aude, but at the Nécropole Canteperdrix, Gard, it occurs with a conical bone button with v-perforation and a strip of bronze ornamented with incised triangles. Thus there is clear evidence that in the South of France, at the mouth of the Rhône and at least as far west as the Aude, an incised pottery very closely related to the decorated Chassey was dominant immediately before the period of beakers there. In this area it clearly dates from the Chalcolithic, but it must be emphasized that this does not imply that metal was in use further north. The Mediterranean character of many elements of the Chassey culture has long been recognized.[14] Evidence, therefore, all suggests that this culture was introduced from the South by way of the Rhône valley to the Camp de Chassey region, where it was superimposed on the earlier plain ware culture which it had already encountered in the Midi. Thence it must have spread as far north as the Upper Rhine and westwards to the Seine-et-Oise area where we find it so richly represented at Fort Harrouard and Catenoy. Belatedly it spread further west to Brittany where only the later forms as distinguished by Philippe at Harrouard[15] are of common occurrence. The decorated wares of the Camp de Chassey and Fort Harrouard regions, although strongly resembling the incised wares of the Midi, naturally show some differentiation, particularly in the great popularity of the *vase support* and the ornamentation in alternately hatched and unhatched triangles (*à damier*), neither of which is prevalent in the south. The culture did not penetrate thoroughly as far east as the Jura, but a multipierced lug from the so-called Upper Neolithic level at Montmoret may betoken a slight influence.

It is now time to turn to a discussion of a type of pottery frequently associated with the incised ware in the South of France which, apart from its inherent interest, has a direct bearing upon British problems.

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[13] *Reallexikon*, IV, I, 22 ff. [14] Déchelette, *Manuel*, I, 559 ff.

[15] Abbé Philippe, *Cinq Années de Fouilles au Fort Harrouard*, pl. XXIV.

This is the ware *à cannelure*. Professor Childe in his paper[16] refers to a bowl now in the St. Germain museum from Viala, Gard, which he with great perspicacity relates to the well known vases from Conguel, Brittany, and thence with British examples. A more certain connexion can now be established and the question of date discussed. This ware is greyish black in colour and usually burnished; bowls like that from Viala are a common form and a flattened tubular lug is typical. The most distinctive feature is the ornamentation executed in wide rounded grooves by means of some blunt-nosed tool. Concentric semicircles combined with panels of vertical lines is a usual motif (FIG. 4, F) but various combinations of horizontal and vertical lines arranged in panels are also common. This ware is of frequent occurrence in the cave burials of South France at least from Gard to Aude, where it is almost invariably associated with the incised ware already described.* Now unmistakable sherds of this ware are to be found among the material from the promontory fort of Peu Richard (Charente Inférieure)[17], where the peculiar 'eye' pottery is identical in paste and in the execution of the design with the ware *à cannelure*. At the Grotte Availle sur Chize, Deux Sèvres, this eye pottery occurs with a much cruder ware ornamented in panels of rough zigzags and horizontal grooved lines similar to one of the bowls from Conguel. This chain of evidence leaves little doubt that the Conguel bowls and other Quiberon examples, although of cruder paste and execution, are directly connected with, and probably imitations of, the ware *à cannelure* of the South French caves. In regard to a possible extension of influence to Britain the writer believes that the relationship suggested between the Quiberon group and that of Beacharra (Kintyre) and Larne was well justified. The immediate derivation of both groups from the South French ceramic is at least as well substantiated by the foregoing evidence as is the recent claim for a Baltic influence in the British group. One of the Beacharra pots is decorated in the true grooved technique and there seems little reason against assigning the use of cord on other vessels from this site and on the Larne sherds to a Peterborough influence. Evidence for the dating of this group in the South of France is not lacking. It has already been said that it constantly accompanies

[16] *Archaeological Journal*, 1931, LXXXVIII, 37–66.

* Examples thus associated come from the dept. Gard at the Grotte Salpetrière, Nécropole Canteperdrix, Grotte de Firolle, Grotte St. Vérédème, Grotte Fromagerie. From dept. Aude: Trou du Loup.

[17] *Matériaux*, 1882–3, 505ff.

the incised ware which we have there assigned to the Chalcolithic period, but further it occurs abundantly at the Nécropole Canteperdrix, conveniently associated with a conical button with v-perforation and a small fragment of bronze. It seems, therefore, that the South French ware *à cannelure* may safely be considered chalcolithic ; but its western influence, if such an influence be admitted, perhaps preceded the extension of the use of metal to the remote regions of Brittany and Northwest Britain.

This discussion naturally leads up to the third of Professor Childe's western groups, the Breton. The essential point to be emphasized is surely the extreme lateness of this culture. At Conguel the grooved pots were found stratified below beakers, but at the settlement of Er Yoh M. Péquart has found sherds very similar to the zigzag Conguel variety clearly associated with beaker, an occurrence which should not be unexpected when it is considered that the probable prototype in the South is there only immediately pre-beaker (p. 35.) There is no sure indication that any Breton megalith antedates the arrival of beakers in the peninsula, a conclusion which is supported by the Channel Islands' evidence[18] and further by the recognized lateness of the Chassey influence. Nor must it be forgotten that Mr E. T. Leeds[19] and others have shown the *vase support*, that most typical product of the Chassey influence, to be in some way the inspiration for the British Middle Bronze Age incense cup. It follows that in the Breton western ceramic with its typical carinated bowls, and in the Channel Islands equivalent, may be recognized the last certain descendant of our old western family.

Meanwhile, in Britain, Windmill Hill pottery shows the simple forms of the first of Mr Piggott's phases developing the carinated shapes, evolved lugs and use of ornament characteristic of the second. There is as yet no evidence, though it may well soon appear, to prove that the second great group of British Neolithic pottery, the Peterborough, was introduced before this later phase.

In its fullest extent the period under discussion saw the main series of impulses which diffused the ' Megalithic Idea ' about the Atlantic and North Sea coasts. As we have already suggested this ' idea ' seems to have imposed itself upon the different cultures against which it came in contact, with the result that varying responses to the

[18] Kendrick, *Channel Islands*, p. 9.

[19] *Archaeological Journal*, 1931, LXXXVIII, 52.

stimulus gave rise to a number of distinct groups of megalithic architecture. Among the western groups the long barrows of Britain had a comparatively early beginning. They form an example which may be held to illustrate, as well as any, the original independence of this ' idea ' from the cultures which it affected. It reached this country, in the writer's opinion, at a period corresponding with the late A1 or early A2 phase of Windmill Hill, shortly before or after the arrival of the Peterborough people. Certainly pottery representing both cultures occurs in long barrows. That the Peterborough is much more rarely found in this context is surely mainly due to the pre-eminently eastern distribution of the culture in contrast with that of the early long barrows. In support of this belief is the recent discovery of Peterborough ware in the only long barrow of the Lincolnshire group which has seen excavation. Any original connexion between the introduction of the Windmill Hill culture and megaliths into this country is incompatible with the main thesis of this paper. But admittedly we require more than existing British evidence alone if we are to deny it absolutely.

We have now treated of the three ceramic groups of the Chassey, Michelsberg and Breton cultures, which, despite external influence and internal development, still show their common descent from a general Western Culture. Let us conclude with some tentative suggestions concerning that culture of the Seine, Oise and Marne basins which is generally recognized to be of distinct origin from these three groups across which it cuts geographically. This SOM Culture has many distinctive features[20] but perhaps most distinctive of all is the typical vase form with everted rim, well marked shoulder, and splayed foot (FIG. 6 A). Now Dr Vogt of Zurich has recognized a close affinity between this ware and the pottery of the ' Middle Neolithic ' of Vouga, which he would term Horgen after a site on the Lake of Zürich. It can be seen by comparing FIGS. 6 A and 6 B–C and *Arch. Journ.* LXXXVIII, page 47, how very real is this resemblance both in general form and in detail—particularly in the constructions of the bases. At the Neuchâtel stations this Middle Neolithic is stratified over the Early Neolithic from which it is separated by a sterile layer and from which it differs entirely both in the form and paste of its pottery. At Crufensee in northern Switzerland it occurs above the Michelsberg and below the ' *schnurkeramik* ' levels, and at Utoqué, Lake Zurich, it is again found below *schnurkeramik*. The pottery evidence, striking though it is,

[20] *Archaeological Journal*, 1931, LXXXVIII, 49. Kendrick, *Axe Age*.

would be insufficient alone to establish a connexion between the Horgen and SOM cultures, but there is one other point which further supports it. In the Marne Valley the Abbé Favret has detected the presence of pile-dwellings among the marshes bordering the river ; none has yet been excavated but they yield unmistakable sherds of SOM pottery. The origin of the two cultures and the nature of their relationship are alike obscure, nor is there space here to discuss the problems involved. The purpose of this brief reference is only to hint that the relationship is real ; further investigations alone can elucidate it.

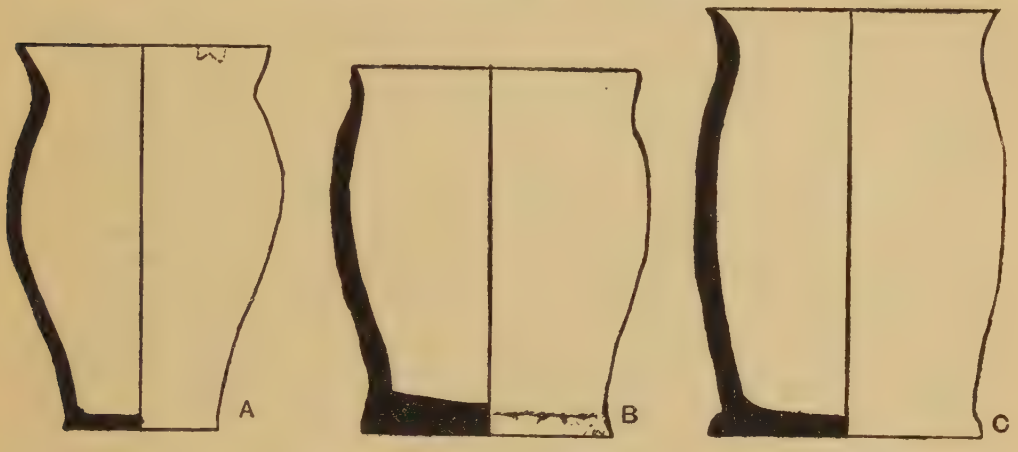

FIG. 6 (sketched)
A, SOM VASE. ALLÉE COUVERTE DES MUREAUX-SEINE-ET-OISE
B, MIDDLE NEOLITHIC, LAKE NEUCHÂTEL
C, MIDDLE NEOLITHIC, LAKE OF ZÜRICH

Some attempt has already been made to establish a relative chronology for the various cultures here discussed. In order to effect this more securely we look longingly for some infallible touchstone to guide us ; there seems some hope that this may be found in Grand Pressigny flint-work. It is improbable that the exportation of this remarkable product of the Indre-et-Loire, in its most technically specialized form, should have lasted for any great length of time. Its presence or absence in a given culture must, then, help to establish its chronological relation with any other. In applying this test it seems significant that the products of the Grand Pressigny industry do not appear on Lake Neuchâtel until period IV of Vouga's classification, nor do they form part of the British Windmill Hill culture. On the

other hand they occur at many Michelsberg sites and in both levels at Fort Harrouard[21]: They are often found in Breton megaliths, and are one of the recognized features of the SOM culture. Corroboration for the Grand Pressigny evidence can be sought from a study of the occurrence of perforated stone axes. These are not found until Vouga's second period on Neuchâtel nor in Britain before they appear in company with beakers, but they are well known in Michelsberg and SOM contexts. Thus both these channels supply evidence which harmonizes very agreeably with that which has gone before, yet our knowledge of either is sadly inadequate.

The table (page 41) will help to summarize our conclusions. We have postulated the existence in Western Europe of an early culture which was not wholly autochthonous, yet which owed its inspiration neither to the civilization of the Danube nor to such picturesque voyagers as the 'Children of the Sun'. This culture we have identified in South and East France, West Switzerland and Britain, but its limits cannot as yet be determined. Nor is it possible to do more than speculate as to its origin and lines of diffusion. General probability has suggested that the movement in our area was from the South of France up the Rhône valley to Switzerland, and thence to Britain by a route which certainly did not touch upon Brittany. We have supported the view that this early Western Culture was established on the West Swiss lakes during the first Danubian period.

We have claimed that upon this followed a period which saw the breaking up of cultural unity through geographical separation and diverse external influences. During this phase of differentiation a branch from the western stem showing Danubian influence extended down the Rhine as the Michelsberg culture. Contemporaneously an influence, manifested in more sophisticated pottery, spread from Southeast France northwards and then westwards, imposing itself upon its predecessor to form the Chassey culture. A belated impulse brought the Chassey further west, where it joined with other elements to form the familiar yet elaborate cultural pattern of Chalcolithic Brittany. Another element in this pattern was due to that SOM culture which cut across our area from Belgium to the Channel Islands, as an intruder alien to our western stock. Meanwhile, following upon a period of severe flooding, the West Swiss lakes were resettled by a people whose culture showed some continuity with their predecessors but

[21] Abbé Philippe, *Cinq Années de Fouilles au Fort Harrouard*, 121.

Chronological Table

Block Capitals indicate the Western Culture and its derivatives.

SOUTH FRANCE	EAST AND NORTH FRANCE	WEST ALPINE LAKES	BRITAIN	RHINE	PERIOD (DANUBE)
PLAIN WESTENKERAMIK (GROTTE de BIZE)	(CAMP de CHASSEY)	VOUGA I	WINDMILL HILL, AI	Bandkeramik Rössen, etc.	Danube I 2600 B.C. Danube II
DECORATED WARE GROTTES I	CHASSEY I	MICHELSBERG	WINDMILL HILL, AII Long Peterborough	MICHELSBERG	2300 B.C.
Megaliths: Beakers: Grottes II	BRITTANY CARINATED BOWLS CHASSEY II Beakers Megaliths -Seine- -Oise- -Marne culture	Vouga II	Beakers Barrows	Corded Ware Beakers	Danube III 1800 B.C.

incorporated other quite new features. Their pottery has suggested a connexion with the SOM.

In Britain the culture we know by the name of Windmill Hill was, as we have seen, early established. The stratification of this classic site has enabled us to follow its development through two principal stages, the course of which saw the introduction of long barrows and the Peterborough culture into this country. Thereafter it was merged in those various movements of foreign immigration and influence which brought to an end our true Neolithic Age.

Notes on the Origins of Hiberno-Saxon Art

by A. W. Clapham, F.S.A.

ONE of the outstanding problems of British archaeology and perhaps the most important of those which still await solution, is that involved in the revival of Celtic and La Tène motives in 7th century art. This question has been discussed in various recent publications by Dr Mahr, Mr Kendrick and Dr Wheeler. So far however there is no sign of ultimate agreement. With this question is bound up the origins of that Irish Christian art which had so spectacular a blooming in such objects as the Books of Durrow and Kells, the high crosses of Monasterbois and Clonmacnoise and the Tara brooch.

It is the purpose of the present notes to examine afresh the evidence of the origins of this Irish art, perhaps from a rather different angle, and if it be not possible to arrive at any definite conclusion, at any rate to bring forward some new factors bearing on the problem which have not so far been considered, and which may, I hope, serve to advance its ultimate solution.

In dealing with the subject I propose to abandon all preconceptions and to accept nothing as either Irish or English without definite evidence. As recently as 1924 Professor Brøndsted in dealing with the Lindisfarne Gospels declared it to be ' a purely Irish work in its ornamentation '. In this he only subscribed to the commonly received opinion which has been held so universally and so long that it emboldened Professor Macalister to jettison the direct evidence of the date of the same book because he could not otherwise place it in the sequence of Irish art. It will be our purpose on the other hand to enquire if indeed this and other works have a place at all in Irish art, and if so what that place may be, either as an exemplar or a copy.

The proposed line of enquiry will be two-fold, the first directed towards the evidence as to what constituted Irish art in the 7th century, and the second to what constituted English art at the same period. Of the two enquiries, the former will be the more difficult and indeed

if we depended on Ireland alone, would be almost insoluble owing to the nearly complete absence of dated material of this period in the country. The companion study however of the material from the Celtic parts of Great Britain closely affected by Irish culture and of the Irish monastic colonies planted on the continent will assist us in arriving at some more definite conclusion.

Various explanations, as I have said, have been advanced for the revival of Celtic art-forms in England during the Dark Ages, the discussion centering mainly on the enamelled bowl-escutcheons with returning spiral ornament found generally in pagan Saxon graves. On the one side an attempt has been made to bridge the gap between early and late Celtic art and establish a continuity in the tradition. On the other side it has been postulated that the spirit of Celtic art required only favourable conditions to awake from its long sleep to new life. So far as I am aware however no attempt has been made to establish a continuous connexion, alike historical and artistic, between the art of the two ages, and yet such a link, I am persuaded, does actually exist.

FIG. 1.
SILVER PLAQUE, NORRIE'S LAW, FIFE
(*Romilly Allen*)

The origin, affinities and language of the Picts has provided the subject, in the past, of one of the most voluminous and acrimonious controversies ever waged between contending antiquaries, a controversy which now lives only in the pages of Sir Walter Scott's *Antiquary*. With this dispute, fortunately, we have nothing to do, and we are not concerned with the racial origin of the Picts but only with their art and with the recorded particulars of their migrations.

It is now generally agreed that the large number of stones to be found in almost all parts of Scotland, and distinguished by the use of a remarkable series of incised symbols, are to be connected with the Pictish race. They are to be found throughout the country save in the districts occupied by the Dalriadic Scots or Irish and the Strathclyde Britons, and the use of the symbols continued on far into the Christian period, being often found in conjunction with the Christian symbol.

It has been asserted indeed by certain authorities that these Pictish symbols are all of the Christian period and if this were so our whole argument would fall to the ground. Such a position is however quite untenable, the symbols themselves can have no possible Christian significance and their evolution after the general conversion of the country is

almost grotesquely improbable. In the rudest and presumably earliest monuments of the series the symbols are cut on the surfaces of unhewn blocks of stone and never occur in conjunction with the Christian symbol. These examples we may presume to date from before the general conversion of the country by the missionaries of Columba. This conclusion is strengthened by the occurrence of the same symbols on metal objects (FIG. 1) from Norrie's Law (Fifeshire), found in conjunction with coins extending down to the Emperor Tiberius II (578–82).

We may thus feel assured that the Pictish symbols were in use in their developed form, independently of any influence from Ireland,

FIG. 2. SYMBOL-STONE, NEWBIGGING LESLIE, ABERDEEN
(*Romilly Allen*)

especially as they do not occur in the then purely Irish district of Argyll.

Let us now examine the forms and decoration of these symbols. In regard to the forms, two only need concern us, but both of these are of the most signal importance—the mirror symbol and the so-called spectacle symbol. The first of these is in form an exact reproduction of the well-known metal mirrors (FIG. 2) of La Tène art, and so far as I know this form is unknown in the mirrors of any other age or culture. The spectacle-symbol likewise would appear to be taken direct from the central enrichment of the La Tène shield, such as that found in the Witham. It would seem difficult to find more convincing proof of the continuity of La Tène art amongst the Picts than the survival of

these symbols, which must have been first adopted by people familiar with the objects represented. That this was not a survival of mere form only is indicated by the linear decoration of these and other symbols of the Pictish series. Many of these (plate, FIG. 3) display the sweeping curves of La Tène art and though the fully developed trumpet-spiral of later Celtic art does not appear in its developed state its embryonic forms are frequently apparent.

Let us now examine the historical aspect of the question and consider how the survival of this Pictish art may have affected the revival of Celtic art in Dark-Age England. The operations of the Picts against the tottering structure of Roman power in Britain have been familiar to all of us from our early childhood, but it is with the later rather than the earlier manifestations of this activity that we are immediately concerned. Apart from the sweeping but transitory raids of the 4th century there is evidence of greater significance in the 5th century. In the record of the mission of St. Germanus to Britain in 429–30 we find him leading the harassed Britons to victory (the Hallelujah Victory) over the combined and presumably allied forces of the Picts and Saxons. That some of these Picts settled in the harried and depopulated areas is in the highest degree probable, and a slight but possibly significant indication of the widespread extent of this settlement is provided by an entry in the Saxon Chronicle. Under the year 508 it is recorded that Cerdic and Cynric slew a British king named Natan leod and slew five thousand men with him. It is further stated that he gave his name to Netley (identified by Mr O. G. S. Crawford with Netley Marsh near the mouth of the Test) in Hampshire. The significance of this entry lies in the fact that the name of the king would seem to be Pictish and indeed occurs in the traditional list of kings in the Pictish Chronicle.

We may thus perhaps assume that of the three chief troublers of Romano-British peace, the Scots (or Irish) raided the western shores and sometimes settled there, the Saxons harried the eastern coast, leaving to the Picts a broad pathway through the heart of England, where they pillaged or settled in the open country either alone or in conjunction with the Saxons. The ultimate triumph of the latter and the Saxon sources of our later history, have almost but not quite obliterated all traces of the Picts and only an unexplained element in the art of the early Saxons would lead one to recall the facts of their incursions and possible settlement.

Let us now apply these particulars to the problem in hand and for this purpose we cannot do better than study Mr Kendrick's distribution-

map* of the Celtic bowl-scutcheons, found in various parts of England and generally in connexion with pagan Saxon burials. We see from this map that the area covered by this distribution is roughly the eastern and central parts of England and leaves untouched the unconquered Celtic districts of the west and southwest. This alone would seem to indicate, very forcibly, that the untouched Celtic population had nothing to do with the matter and the motive is so foreign to the Teutonic art of the Saxons that it is impossible to believe that they were in any way personally responsible for its revival. The district covered by the examples, on the other hand, does cover the area reasonably assigned to the operations of the Picts and the combined Picts and Saxons. We have thus, I suggest, all the required elements for the solution of the puzzle—the survival of a form of La Tène art amongst a people of this island at the required date—the opportunity for the introduction of that art into the very districts in which its (rather later) examples are found, and finally a native Celtic subsoil (in the submerged Britons) in which this re-introduced art had every opportunity of springing to new life.

It should be noted however that no example of actual Pictish symbols has ever been found south of the Border and the art of the bowl-scutcheons is a developed form which is not found in Pictish art. We must thus assign to the Picts the part of carriers only, of sowers of a seed which came to a development in the Celtic sub-soil of Britain itself.

One other point before we leave the Picts. In every way the most remarkable product of Pictish art is the extraordinarily able and naturalistic representation of animal-forms which alone would serve to mark the race as possessing other elements than Celtic. It may be that in this also Pictish traditions had some influence on later Anglian art. Neither the Saxons nor the Celts had of themselves any capacity for naturalistic representation, and while the Anglo-Saxon carvers had no doubt some training from imported artists from the Mediterranean, yet their rapid acquirement of a facility for rendering animal-forms argues some better groundwork than the conventionalized art which was their native inheritance.

Let us turn now to the other side of the question and see if it is possible to ascertain what actually did constitute Irish art before the contact of the Irish with Anglian culture—that is to say before the middle of the 7th century.

* ANTIQUITY, 1932, VI, 180.

In this connexion, besides Ireland itself, such districts as the Scottish Dalriada and the Isle of Man must be included as deriving their culture direct from Ireland, as well as those continental monastic houses founded by St. Columban and his immediate followers whose personnel was continually recruited from Ireland itself. In addition certain parts of Wales and southwest Britain were strongly influenced from Ireland and may be expected to show some trace of Irish culture.

To take Ireland itself first ; here we are at once confronted with an utter lack of definitely dated material and we can only consider those objects which appear to be the earliest in the later series. In stone the only ornamented object which has any claim to be assigned to this early period is the rough block formerly at Mullaghmast and now

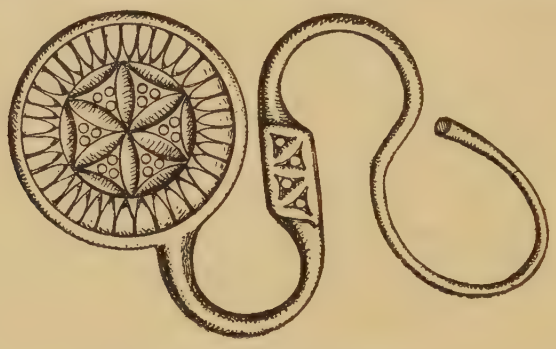

FIG. 8. BRONZE LATCHET, NEWRY
(*British Museum Anglo-Saxon Guide*)

in the National Museum. This is decorated with a design of primitive returning spirals which certainly belong to Celtic art. It is however quite uncertain if this stone does not belong to the La Tène period itself, in which case it has nothing to do with our argument. In addition there are a number of crude totem figures of extremely barbaric form, which again do not assist our argument one way or the other. At the head of the series of standing-crosses however are a few which Mdlle. Henry would assign, we think with too much temerity, to the 7th century. Amongst these are two at Carndonach (Donegal) and Templeneiery (Tipperary) which are decorated in a style which is never again represented in the long series of later crosses, for which Ireland is famous. This decoration takes the form of a simple circle enclosing radiating petals (plate, FIG. 5) which we will call the marigold

FIG. 3. SYMBOL-STONE, DUNNICHEN, FORFAR
(*Romilly Allen*)

FIG. 4. GRAVE-SLAB FROM CLONMACNOISE
(*Mahr, Christian Art in Ireland*)

FIG. 5. STELE OF CARNDONAGH, WEST FACE
(*François Henry*)

FIG. 6. SLAB, CLADH BHILE, ELLARY, ARGYLL
(*Romilly Allen*)

FIG. 7. MARIGOLD ORNAMENT, MISSALE GOTHICUM
(*E. H. Zimmermann*)

facing p. 48

pattern. The same pattern appears on a latchet from Newry[1] (FIG. 8), on a tomb-slab (plate, FIG. 4) at Clonmacnoise[2] (founded 547) and perhaps very occasionally elsewhere.

We find the same marigold on two slabs at Kirk Maughold (Isle of Man), one being on the inscribed slab (FIG. 9) of a bishop of the island, associated with a XP which hardly permits it to be assigned to a later date than the 7th century at latest, for the XP monogram does not occur in any save the earliest Christian monuments in these islands and is almost unknown in Anglian art.

The Scottish Dalriada has provided a considerable number of Christian stone memorials, and of these all the enriched examples, with one exception, are of demonstrably late date and have never been claimed by any author as approaching by several centuries the age of Columba. They are however preceded by a large number of stones cut with a simple cross, which presumably represent the earlier memorials of the Columban church and by a single slab (plate, FIG. 6) with marigold enrichment from Ellary, Argyllshire.

The same simple cross-forms are represented on the earlier slabs in the long series from Clonmacnoise, and can be paralleled in a large number of isolated cases in Wales and Cornwall, where they are not superseded by the enriched standing-cross until a period perhaps as late as the 10th century. They are significantly infrequent in the early Northumbrian sites, where their type was rapidly superseded by more enriched forms.

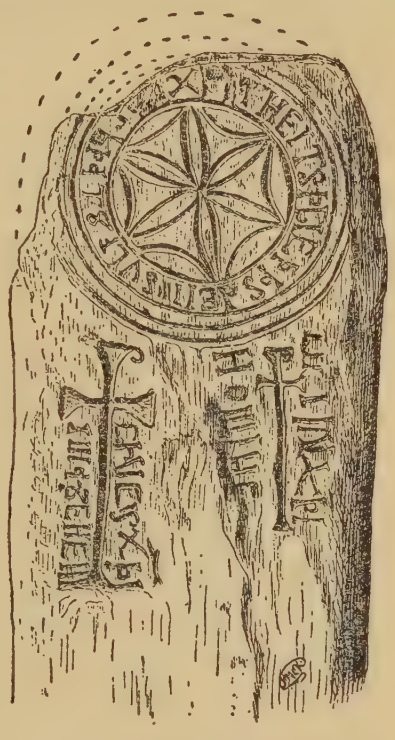

FIG. 9. INSCRIBED STONE, MAUGHOLD, ISLE OF MAN
(*Kermode and Herdman, Manks Antiquities*)

In certain definite places it is thus demonstrable that in stone-cutting at least, Irish influence, direct or indirect, produced no trace of Celtic art until a period when its component forms had long passed

[1] *British Museum Anglo-Saxon Guide* 1923, fig. 171.

[2] A. Mahr, *Christian Art in Ancient Ireland*, I, plate 43 (8).

their prime in England. In Ireland itself the earliest date now assigned to even the simplest of the enriched crosses does not go back before the middle of the 7th century and this dating itself is a mere matter of opinion and is supported by no evidence.

The survival in isolated cases of decoration of the marigold type on stone monuments of early date only, is, we think, of some significance as it indicates that it belongs to an earlier age and was entirely superseded by the forms of Celtic art in which it found no place. It was furthermore a type of ornament peculiarly adapted for cutting in wood, from the chip-carving of which it was ultimately derived.

This form of decoration seems to have first made its appearance in the Roman provinces under the later Empire and is generally considered to be of barbaric origin. Its examples are scattered pretty widely, but there can be no doubt that the district in which it obtained the greatest favour was southern France and Spain. So much is this the case that it may be looked on as the most characteristic feature of Visigothic art. All over Spain, at León (FIG. 10), Merida, Toledo, Cordova (FIG. 11) and Lisbon it occurs. In France it is perhaps less frequent but occasional examples occur from Poitiers southwards. All or nearly all these examples are safely dated between the 4th and the 7th centuries.

It may be assumed that the beginning of Irish learning took its rise from the migration of the alumni of Bordeaux and other cities to Ireland, recorded by an anonymous author as occurring early in the 5th century. With them was perhaps introduced that Christianity which existed in Ireland before the arrival of St. Patrick. The existence of this same South Gaulish and Spanish influence has recently been pointed out in the earliest Irish Penitential[3], that of Vinnian, dating from the middle of the 6th century.

We have thus a fully attested connexion between Ireland and southern France in the 5th century and the traditional connexion with Spain is confirmed by the occurrence on the stele at Fahan of a Greek formula approved by the Council of Toledo in 633. What then is more probable than that the chip-carved forms of decoration popular in these countries at the time should have been transmitted to Ireland and adopted by the Irish themselves. The evidence admittedly is slender, but it is difficult to account for the isolated examples in Ireland and lands under Irish influence, on any other hypothesis. The only alternative seems to be to admit that for some centuries before the latter part of the 7th century the Irish produced no decoration of any

[3] *Speculum*, VIII, p. 492.

sort. The evidence from metal objects is equally negative, for no decorated metalwork can be or has been assigned with any authority to a period earlier than the end of the 7th century, with the solitary exception of an enamelled scutcheon of the English type, which may be either an importation or loot.

In the department of manuscripts however some further and very striking evidence is available if of an equally negative order. The great continental monasteries of the Irish missionary Columban and

FIG. 10. STELE, LEÓN MUSEUM
(*A. Haupt*)

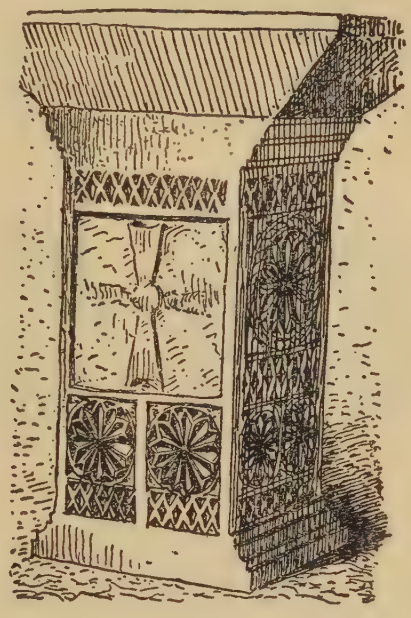

FIG. 11. STOUP (?) AT CORDOVA
(*A. Haupt*)

his followers, Luxeuil, Bobbio and the rest, founded round about the year 600 and celebrated as places of learning, have bequeathed a few manuscripts which may with confidence be assigned to the first century of their existence. Here, if anywhere, we should expect to find evidence of the early beginnings of Hibernian art, as the art of drawing on a flat surface is the necessary preliminary for any but the very crudest carvings on stone or wood.

It is with much diffidence that I offer any suggestions on this branch of the subject as it is one on which I am in no way competent

to speak. I shall in consequence base my remarks on the conclusions arrived at by Dr Zimmermann, whose survey[4] of pre-Carolingian manuscripts is the most careful and comprehensive which has yet appeared. In his first volume he illustrates a long series of manuscripts which he assigns to the school of Luxeuil and of which the earliest, in the Morgan Library, is definitely assigned to the date 669. A number of others are placed by the author in the second half of the 7th century and of these I would call particular attention to the Missale Gothicum at the Vatican (plate, FIG. 7).

Throughout the whole of these manuscripts, which provide a considerable corpus of decorative forms, there is no trace of anything remotely resembling the typical ornaments of Irish Christian art. The forms are exclusively those elsewhere in use in Western Europe in the

FIG. 12. ESCUTCHEONS, LULLINGSTONE, BARRINGTON AND LOWBURY

7th and earlier centuries, and are mostly of late Roman, early Christian, Merovingian and Visigothic origin. We are in fact in the presence of an art which is a fuller expression of that same art which I have suggested was introduced into Ireland by the refugees of southern Gaul in the beginning of the 5th century. Thus we find numerous examples of what I have called the Marigold ornament (plate, FIG. 7) and one example of the Marigold diaper (in the Missale Gothicum) which is identical with that on the slab at Clonmacnoise.

It is not however on the positive but rather on the negative side, that the evidence from these Continental manuscripts is of the greatest value. It is difficult if not impossible to believe that had Irish Christian art existed in the earlier part of the 7th century it should have left absolutely no trace in the decorations of manuscripts immediately or

[4] E. H. Zimmermann, *Vorkarolingische Miniaturen*, (Berlin, 1916).

more remotely connected with a monastery such as Luxeuil, founded and originally colonized by Irish missionary monks.

The same entire absence of Irish motives is also to be found in the earliest manuscripts connected with the abbey of Bobbio.

If it be urged that this is due to the early failure of Irish influence in these monasteries, I would point out that not only is this not borne out by the known historical facts, but that once the end of the 7th century is passed the Irish and semi-Irish monasteries of the continent of Europe become almost flooded with products of that very Irish art which is entirely absent from the works of the previous century.

FIG. 13. CARVED STONE, SOUTH KYME CHURCH, LINCS.
(*Antiquaries Journal*)

If these facts be admitted, I submit that they form a very strong if not conclusive argument that Irish Christian art was unknown in Ireland before the close of the 7th century.

Let us now consider the component parts which make up the groundwork of Anglian art at the end of the 7th century, neglecting those features, obviously introduced from the Mediterranean, such as the true and ivy vine-scroll with the beasts and birds which climb and perch in its branches. Let us take for example the Lindisfarne Gospels, (dated to *c.* 710) as the leading example of so-called Hiberno-Saxon art, and consider in turn the various decorative forms which enrich it. Apart from the figures of the Evangelists themselves, which are obviously of Classical

inspiration, no feature of this book displays the southern art of the high-crosses of the same age which only appear in English illumination at a rather later date. The reason for this is obscure, for one cannot always explain why a certain form of decoration is in free use in one medium while it is almost entirely absent from another of the same age. The fact remains that the vine-scroll of contemporary stonework does not appear at all in the Lindisfarne book while the trumpet-spirals of the book appear only once in the stonework of that date.

The decorative motives of the book may be divided into geometrical

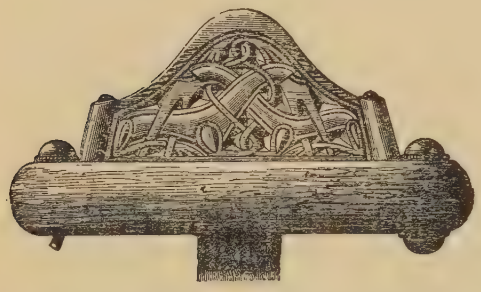

FIG. 14. SWORD POMMEL, CRUNDALE KENT
(*Åberg, Anglo-Saxons*)

FIG. 15. SILVER DISK, CAENBY, LINCS
(*British Museum Anglo-Saxon Guide*)

FIG. 16. FRIEZE OF ANIMALS, BOOK OF DURROW
(*British Museum Anglo-Saxon Guide*)

and animal. The chief geometrical motives are the following: (a) trumpet-spiral, (b) interlacement, and (c) diagonal fret, while the animal forms are confined to (a) the bird or cormorant, and (b) the beast or whippet in various forms. The trumpet-spiral, as we have seen, had been at home in England at least one century and perhaps two before the book was written. The bowl-scutcheons (FIG. 12) of pagan Saxon burials bear it in almost identical form, and the same form is reproduced on a single carved stone from South Kyme (FIG. 13) in Lincolnshire. There can be no question of the priority in date of the bowl-scutcheons over any datable example of the motive in purely Irish art, and there is consequently not the slightest reason for assigning an Irish origin to it.

The Interlacement was brought, in the Lindisfarne book, to a degree of complexity which was never subsequently surpassed. It appears in very similar form on the contemporary and earlier high-crosses of Northumbria. The ultimate origin of this interlacement does not greatly concern us ; the important fact is that it had been adopted into the Teutonic art of the Migration period and is to be seen in quite a complex form on pagan Burgundian buckles from Charnay or on the mounts of the pagan Saxon period from Caenby, Lincs. It would be difficult if not impossible to find the motive in Irish art at a period approaching this age, and there is consequently no reason to assume that the artist of the Lindisfarne book drew from any but

FIG. 17. CROSS-SHAFT, LINDISFARNE
(*Archaeologia*)

local originals for this form of decoration. The diagonal fret is of more uncertain origin, but in any case the fret is a Classical and not a Celtic form and in consequence hardly concerns the present argument. In stone it appears in some of the earliest of the Northumbrian crosses, *e.g.*, Abercorn (681–5), probably Lindisfarne and Northallerton, to which any appearance of the form in Ireland is almost certainly subsequent.

Turning now to the zoomorphic forms. The bird is readily recognizable from its large eye and hooked beak as belonging to the gull or bird of prey type. Its position in northern Teutonic art has been fully established whether or not it be a borrowing from the Scythians. That it passed into Celtic art by way of the Anglo-Saxons can hardly be disputed. The beast is firmly established in Anglo-Saxon art in the pagan period, *e.g.*, at Crundale Down (FIG. 14)

and Caenby (FIG. 15), and appears also on a cross-shaft (FIG. 17) at Lindisfarne itself. In the Lindisfarne book it is sometimes rendered in an entirely naturalistic form closely resembling the whippet, but it is essentially the same beast which appears conventionalized, contorted and provided with a long snout with which it seizes the back of its neighbour as in the Book of Durrow (FIG. 16). This beast becomes the ribbon-beast when rendered as a symmetrical design.

What then was the art-situation in Northumbria in the second half of the 7th century ? In broad outline, we find two largely distinct currents of development running side by side and possessing only a certain number of motives in common. Thus the art of the stone carver is essentially distinct from that of the illuminator, the one avoiding some of the motives which are most favoured by the other. This demands an explanation, which I think can be supplied by a consideration of the circumstances in which both forms of art were produced. We have seen that all the components of the geometrical and conventional ornament were already available in Anglo-Saxon England, and the Mediterranean features of the figure drawing, vine-scroll and animal ornament were introduced as a consequence of the Italian mission of St. Theodore and perhaps even earlier. We may further assume as certain, that the Northumbrian stone-carvers were trained by Mediterranean masters, and rapidly acquired such a proficiency in the art as to render their work an unparalleled performance for its age. No one doubts on the other hand that the learned Irish missionaries brought with them proficient scribes and that the Northumbrian scribes were trained in turn by them.

As a result we find the stone-carver choosing from the common stock the southern motives of his masters, together with certain other features such as interlacement, which had long been familiar to him. The illuminator on the other hand, either Irish himself or Irish-trained, chooses those forms which are akin to his Celtic instincts, and neglects the southern forms whose naturalism was repugnant to him. In this connexion it may be noted that apart from the evidence of the Colophon to the Book of Lindisfarne it is obvious that its scribe must have been a Northumbrian, for while he kept religiously within the accepted corpus of the manuscript motives of ornament, no Celt could conceivably have produced the figures of the Evangelists which are directly copied from sub-Classical originals.

We may thus imagine the Irish missionaries from Northumbria returning to Iona and Ireland and carrying with them the developed

art of the manuscripts, which they had in some sort evolved from its *disjecta membra* in northern England. Perhaps its first surviving fruit was the Book of Durrow, which one author has tentatively assigned to Iona itself. In any case all the available evidence goes to show that the Irish came to Northumbria without any form of Celtic art-expression and left it capable of producing the highest forms of Irish Christian Art.

Let us finally attempt to sum up the conclusions reached. Celtic art, so far as the evidence goes, had not survived the period from the 2nd to the end of the 4th century of our era in any part of the British Islands save in Caledonia, where the Picts had preserved some of the forms and features of La Tène art. The raids, invasions and settlement in southern Britain by the Picts in the 4th and 5th centuries provided an occasion for the communication of this art once again to the Romanized Celts of our own country, and led to a revival of certain Celtic forms which make their earliest appearance in a pagan Saxon context. The conversion of Northumbria by Irish missionaries first brought the Irish, already a literary nation, into contact with these revived Celtic forms and also with other motives, of Teutonic and more remote origin, which were then current amongst the Anglo-Saxons. In the hands of expert Irish scribes the art of the Book of Durrow and the Lindisfarne Gospels was produced, the scribes choosing only those current motives which appealed to their Celtic sense and leaving untouched those which appear only in stone-carving and other media. The continual communication between the early church of Northumbria and Ireland, either directly or via Iona, rapidly transmitted this new-found art to that country, and its growth was no doubt greatly furthered by the return home of many of the Irish ecclesiastics after their defeat at the Council of Whitby in 664.

There is not only no evidence to show that Irish Christian Art so-called existed at all before the contact with Northumbria but there is some evidence to show that its place was taken by a form of decoration borrowed from southern France and Spain, while the manuscripts of the Irish monasteries on the Continent which can be reasonably dated to the 7th century show only this decoration or forms borrowed from the country in which they were planted.

We must thus conclude that Hiberno-Saxon art was in origin in no sense Irish but that the Irish perhaps welded its component parts into one style ; that this welding probably took place in Northumbria in the second half of the 7th century, and that it was transmitted thence to Ireland and from Ireland over half Europe.

A Scandinavian Cremation-Ceremony

Translated from the Arabic of Ahmad bin Fudhlan by Charis Waddy, sometime honorary scholar, Lady Margaret Hall, Oxford, with introductory note by H. L. Lorimer, Somerville College, Oxford.

Note by Miss Lorimer

MANY years ago, when searching for accounts of cremations which might illustrate those described by Homer, I came across a paper by the late Dr Joseph Anderson, entitled ' Ceremonies at the Incremation of a Norse Chief ', read to the Society of Antiquaries of Scotland in 1872.* A large part of it consists of a translation, apparently the only one in English, of the narrative of an Arab, Ahmad bin Fudhlan, who early in the 10th century visited a Scandinavian settlement on the Volga and there witnessed the cremation of the body of a chief. Though it attracted much attention at the time and is of great intrinsic interest, Anderson's paper is now virtually unknown, and except for Orientalists the important Arab document is available only in Holmboe's Danish version, from which Anderson made his translation, and in Fraehn's German translation of 1823. As Anderson's translation was not made from the Arabic, was slightly expurgated, and is not very accessible, it seems worth while to publish a new translation made from the original text by Miss Charis Waddy. This was originally intended to form an appendix to an article on cremation in the Aegaean area and in Homer which had appeared in the Journal of Hellenic Studies,[1] but proved to be too long. I am grateful for the opportunity of publishing it, almost simultaneously, in ANTIQUITY, for it supports the point which I sought to establish, *viz.*: that for all the glamour thrown over it by Homer, cremation of the dead is naturally associated with a somewhat barbaric culture, and in the case of the Greeks was mainly practised at an early date and by the more backward members of the race.[2]

The points of resemblance between the cremation of the Rus chief and those of Patroklos and other heroes as described by Homer, will at once strike the classical reader. Besides food and drink and the

* Printed in the Society's *Proceedings* IX, pt. 2, 518–26.

[1] *Pulvis et Umbra*, J.H.S., 1933, LIII, 161ff. [2] See p. 101 *post*.

garments and weapons of the dead man, only the bodies of living things, whose spirits can accompany him, are burned with him. A tumulus is raised over the site of the pyre and the equivalent of a stele placed on the top, a type of monument alluded to in the Iliad. In one point Homer is more advanced ; human sacrifice appears only at the funeral of Patroklos, the victims are combatants, prisoners of war, and the poet gets over the horrid and doubtless traditional[3] business in as few words as possible. He can introduce it, not because it was congenial to Greek sentiment, but because it marks as nothing else could the frenzy of Achilles' remorse. No Greek opinion of which we have cognizance would have tolerated the slaughter of Ἶφις ἐύζωνος, captive and alien though she were.

Note by Translator

Ahmad bin Fudhlan was sent by the Caliph Muqtadir in the year 921 as envoy to the ' King of the Slavs ', or of the town of Bulghar on the Volga, to instruct him in Islamic law, etc. On his return to Baghdad in 922, he wrote a treatise (*risala*), which described all that he saw, but which is lost except for the extracts incorporated by Yaqut (d. 1229), in his Geographical Dictionary (*Jacut's Geographisches Wörterbuch*, ed. Wuestenfeld, Leipzig, 1866–73, 6 vols.). In the course of his journey Ahmad visited some ' Russians', who, he says, had come with their merchandise and settled on the Volga (Wuestenfeld, II, 834). They were in fact Scandinavians (*Rus*) who had established themselves on the Volga and carried on a trade in furs and slaves with Constantinople, which in turn supplied them with gold and silver ornaments, silks and other articles of luxury. His account of them is given by Yaqut in his article on the *Rus*, and part of it is translated here. (Wuestenfeld, II, 837–40. See also Fraehn, *Ibn Foszlans und anderer Araber Berichte über die Russen älterer Zeit*. Text und übersetzung, etc., 1823).

Translation

I was told that when their chieftains died, they used to do certain things with them, the least of which was to burn them. I wished that I could get information about this, until I heard of the death of one of their prominent men. They put him in his grave and made a roof over him for ten days, until they had finished cutting out and sewing garments for him.

[3] There is some evidence for human sacrifice at funerals in prehistoric Greece, though not in association with cremation. See Persson, *The Royal Tombs at Dendra*, 68, 69 and Blegen, *Zygoriries*, 55-7.

What they do for a poor man is to make a small boat, put him into it, and burn it. In the case of a rich man, they collect his money and divide it into three equal parts. One third is for his family, with one third they cut out garments for him, and with one third they buy liquor for them to drink on the day when his maidservant kills herself and is burnt with her master. They are much addicted to wine, which they drink night and day, and often one of them dies with a cup in his hand.

When one of their chieftains dies, his family say to his menservants and maidservants, ' Which of you will die with him ? ' One of them replies, ' I will '. [When anyone has said this, it cannot be taken back, and no one who wishes to withdraw is allowed to do so. It is usually maidservants who make the offer.] When the man I mentioned died, they said to his maidservants, ' Who will die with him ? ' One of them replied, ' I will '. They set two maidservants to guard her, and be with her wherever she went. These even sometimes washed her feet with their hands. They then began seeing to the dead man's concerns, and making the necessary preparations. The girl meanwhile spent every day drinking and singing, happy and cheerful.

When the day arrived on which he and the girl were to be burnt, I came to the river on which was the boat for him. It had been drawn up out of the water, and four supports had been made for it of *khalanj*[4] and other wood. There were set round it wooden figures like tall human beings. It was then drawn further up and set on those timbers. They began going up and down, saying something I could not understand. The dead man was still in his grave, they had not taken him out. They next brought a bier, and put it on the boat, and covered it with quilts and cushions of *Rumi*[5] satin. Then came an old woman, whom they called the 'angel of death', and she spread these on the bier I mentioned, having superintended the sewing and preparations. She had the task of putting the slave girls to death. I noticed that she was dusky, hale, strongly built and austere.

When they came to his grave, they cleared away the earth from the wood, then cleared away the wood, and took him out, in the covering in which he died. I saw that he had gone black, because of the cold climate of the country. They had put liquor and fruit and a lute by him in his grave, and they took all this out. The corpse had in no way

[4] A kind of wood out of which bowls were made. Unidentified.

[5] *i.e.*, Romaic=Byzantine.

altered, apart from the colour. They then dressed him in trousers, gaiters, shoes, a tunic, a satin mantle (*khaftan*), with gold buttons, and they put on his head a cap of sable [and] satin. They then carried him along and brought him into the tent which was on the boat, sat him on the quilt, and propped him up with the cushions.

They now brought liquor, fruit, and herbs and put them by him, then they brought bread, meat, and onions, and threw them down in front of him. They brought a dog, cut it in half, and threw it into the boat, then brought all his weapons, and put them by his side. After that they took two beasts of burden, drove them along until they sweated, then cut them up with swords and threw their flesh into the boat. Then they brought two cows, cut them up also, and threw them into the boat. Next they produced a cock and hen, killed them, and threw them into the boat. The girl who was to be killed, meanwhile, was going up and down, entering one tent after another, and one man after another had intercourse with her. Each one said to her, ' Tell your master that I only do this for love of him '.

When the time of the afternoon prayer of the Friday arrived, they brought the girl to something they had made, which resembled the frame of a door. She put her feet on the palms of the men there, and looked over the frame. She said what she had to say, and they lowered her. Then they lifted her up a second time, she did the same again, and they lowered her. They then lifted her up a third time, and she did the same again, after which they gave her a hen and she cut off its head and threw it away. They took the hen and threw it into the boat. I asked the interpreter what she was doing, and he replied, ' The first time she said, " Behold, I see my father and mother ". The second time she said, " Behold, I see all my dead relations seated ". The third time she said, " Behold, I see my master seated in Paradise, and Paradise is green and fair, and with him are men and servants. He is calling me, send me to him " '.

They passed along with her to the boat. She took off two bracelets which she had on, and gave them to the old woman who was called the ' angel of death ', and who was to kill her. Then she took off two anklets she was wearing, and gave them to the two girls who were in attendance on her, and who were the daughters of the ' angel of death '. Then they raised her on to the boat, but did not take her into the tent. Some men now came along, bringing shields and pieces of wood. They gave her a cup of liquor, and she sang over it and drank it. The interpreter said to me, ' That is her farewell to her companions '.

Another cup was given to her, and she took it and sang for a long time, while the old woman urged her to drink it and to enter the tent in which was her master. I saw that she had become bewildered and wished to enter the tent. She put her head between the tent and the boat, and the old woman took hold of her head and made her enter the tent, and went in with her.

Then the men began beating the shields with the pieces of wood, so that the sound of her screams should not be heard, and the other girls be afraid and not wish to die with their masters. Six men then entered the tent, and all of them had intercourse with her. They then made her lie down by the side of her dead master, and two took hold of her hands and two her feet. The old woman called the ' angel of death ' put a rope done into a noose round her neck, and gave it to two men to pull. She came forward with a large broad-bladed knife, and began thrusting it in and out between the girl's ribs in place after place, while the two men strangled her until she died.

Then the nearest relative of the dead man came and took a piece of wood and set it on fire. Naked, he walked backwards towards the boat, the piece of wood in one hand, and the other on his buttock, until he had set on fire the wood that they had arranged under the boat after they had put the dead slave girl by the side of her master. Then people came with wood and firewood. Each man had a piece of wood, the end of which he had set alight, to put it into the wood which was under the boat, so that the fire should catch the wood, then the boat, then the tent and the man and the girl and everything in it. At this moment, an awe-inspiring gale got up, so that the flames of the fire grew stronger and its blaze fiercer. By my side was a *Rusi*, and I heard him talking to the interpreter who was by him. I asked what the other was saying, and the interpreter replied, ' He says that you Arabs are stupid because you take your dearest and most honourable men and cast them into the dust, so that creeping things and worms eat them. We burn them with fire in a twinkling and they enter Paradise the very same hour '. Then he laughed heartily, and said, ' Out of love for him, his Lord has sent the wind to take him away this very hour '. And in truth, an hour had not passed before the boat, the wood, the dead man and the girl were all burnt to ashes.

Then they built something like a mound over the place where the boat had been drawn up out of the river. They set up in the middle of it a large piece of *khalanj* wood, wrote on it the names of the man and the king of the *Rus* and went away.

The Mountain of 'Uweinat

by W. B. K. Shaw

Wellcome Museum Expedition, Gaza, Palestine

'GENTLY undulating gravel plain', 'limitless expanse of rolling sand', 'succession of low sandstone ridges'—such phrases are common in any book of desert travel, for most of the desert is featureless almost to monotony were it not that its very monotony has a charm which, for those who have felt it, no other landscape can rival. In the desert anything unusual attracts, a patch of rare shade, a hollow with a few dried bushes, a conspicuous hill,—one is drawn to each, sometimes to find the remains of some earlier and less fortunate visitor. So a 6000-foot mountain set down in the heart of one of the worst, one of the most 'howling', deserts in the world merits and receives its share of attention.

The intersection of the 25th meridian east and the 22nd parallel north, where Egyptian, Italian, French and Sudanese territory meets, is about the middle of the mountain mass of 'Uweinat. A few miles south of this point the summit rises to 6217 feet above sea-level and around it the mountain stretches out, 30 miles across from east to west and 25 from north to south. 'Uweinat—the little springs—takes its name from the diminutive of *'ain*, the Arabic for a spring, and its name reflects its importance as a water-point isolated on all sides by barren deserts. The nearest known water to its little group of springs is at Kufara Oasis, 170 miles away to the northwest.

That 'Uweinat was known to Stone Age man is clear from the rock pictures he left behind him; it was visited by the Majabri and Bornawi caravaneers of the early 19th century, but the credit for being the first civilized traveller to 'put the place on the map' is due to Sir Ahmed Bey Hassanein, who reached 'Uweinat from Kufara by camel in 1923 on his great journey from the Mediterranean to Darfur. Though if Crete be a civilized country the first such traveller to see 'Uweinat may have been a Cretan who, so Prince Kemal el Din

records,[1] accompanied a caravan sent in 1916 by Sultan Ali Dinar of Darfur, then engaged in hostilities with the Sudan Government, by way of Merga and 'Uweinat to Kufara to buy arms from the Senussi there.

Mohammed Abd el Karim called Sabun, sultan of Wadai from 1804–15, was an energetic and progressive ruler ; M. Fulgence Fresnel, the consular representative of France at Jeddah in the middle 'forties, was a keen geographer. The former was the first to realize the importance to his kingdom of a direct outlet to the Mediterranean ; to the latter we are indebted for an account of the finding of such a route.[2]

At the beginning of the 19th century the two usual trade routes from Wadai to the Mediterranean were through Tibesti to the Fezzan and Tripoli, or by way of Darfur and the Arba'in Road to Egypt. Both these had their disadvantages. The former suffered from the raids of the Tibesti tribes, and the latter from tolls exacted by the Egyptian Government. Sabun was anxious to find a direct route northwards from Wadai and sent a caravan towards the Egyptian oasis of Dakhla. But the guides lost their way and the whole party perished in the deserts northwest of Darfur. No further attempts were made until 1809 or 1810, when a Majabri Arab from Jalo, by name Shehaymah, arrived at Sabun's court at Wara and offered to find a direct route from Wadai to Augila and on to Benghazi on the Mediterranean coast. The sultan provided a caravan of 500 camels and Shehaymah set out from Wara with promises of great reward if he were successful. From Wara to Um Shaluba and on to the salt pans of Dimi he was crossing fairly well-known country. From Dimi he struck out north-northeast for six days across the desert to 'Gebel en Nari', where a small quantity of water was found in a rock-well at the foot of the mountain, but not enough for so large a caravan. Many of the slaves and camels died of thirst and the survivors rode off three or four hours' journey to the east where they found a second water-course. Leaving Gebel en Nari the party reached Kebabo in Kufara Oasis after five days' journey to the northwest and thence marched via Jalo and Augila to Benghazi.

The position of Gebel en Nari and the rock-well at its foot agree with that of Gebel 'Uweinat, with the spring of 'Ain Duwa at its southwest corner ; and today there is water in Karkur Murr 20 miles to the east. The account of Shehaymah's journey appears to be the first historical reference to 'Uweinat.

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[1] *La Géographie*, Nov. 1928. [2] *Bull. Soc. Géogr., Paris*, 1849–50.

Shehaymah's safe arrival at Benghazi roused the interest of the merchants there and six months later he returned to Wara with a large caravan. The meagre water supply at Gebel en Nari later induced the caravan masters to abandon the first found route in preference for the more direct one from Kufara to Tekro or to the northeast corner of the Tibesti hills, but the road from Benghazi southwards to Kufara and beyond has remained in use up to the present day, though greatly improved by the digging of Bishara and Sarra wells by the Senussi in 1898.

Fresnel, from whose writings this account is taken, got his information in Jeddah from Takruri pilgrims on their way to Mecca, from a Wadaian sheikh at El Azhar in Cairo, and personally while on a mission to Tripoli in 1846.

'Uweinat seems to have been forgotten during the second half of the 19th century though no doubt it was visited and periodically inhabited by Tibbu tribesmen from Tibesti. In 1894 the Senussi moved their headquarters from Jaghbub to Kufara and in the succeeding years their energetic leader, Sayed el Mahdi, sought to extend his religious and political influence to the southward. The opening of Bishara and Sarra wells followed and later, in the 'nineties, 'Uweinat was re-discovered by men sent out from Kufara by el Mahdi. But to the European cartographers the place remained little more than a name. Harding King[3] heard of it from Dakhla before the war and sited it on his map with remarkable accuracy. Arkell[4] gave an account of the journey of Sultan Ali Dinar's caravan from Darfur by way of Bir Natrun and Merga to ' Gebel Anuar ' and thence on to Kufara. Tilho,[5] in Erdi in 1916, heard of ' Djebel el Aouinat an unexplored mountain mass 80–100 miles east of Sarra ', but it was not until Hassanein reached 'Uweinat in April 1923, that its position and character were accurately known.

Hassanein stayed there only a few days, but in 1925 and again in 1926 Prince Kemal el Din, accompanied by Dr John Ball and other scientists, visited 'Uweinat from Egypt by car. To the Prince and his companions we owe the first topographical and geological studies of the mountain.

The heart of the Libyan Desert is monotonously featureless. For mile after mile one may ride one's camel up and down a succession

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[3] *Geogr. Journal*, XLII, 282. [4] *Sudan Notes and Records*, V, 130.

[5] *Geogr. Journal*, LVI, 95.

of low stony ridges hoping from the top of each to get a wide view forward, perhaps to see the legendary Oasis of Zerzura, but only in fact the next ridge beyond. Westwards from Selima one may motor for 100 miles over a vast sand-sheet with hardly a break in its horizon line. To the traveller who has crossed the hundreds of miles of desert from the Nile, the first sight of 'Uweinat is unforgettable. From a confused mass of hills to the north the great central ridge rises 4000 feet above the plain, on the south ending abruptly in a sheer cliff face beyond which stand out the sharp pinnacles of the Triple Peak. In the foreground rises the blunt cone of Ras el Abd and from the haze across the plain southwards the fine peak of Gebel Kissu (PLATE I).

Geologically Gebel 'Uweinat is divided into two parts, the eastern end of Nubian sandstone which includes the summit and the steep southern cliffs, and the western end of granitic rocks. A number of valleys, locally called *karkurs*, cut back into the mountain mass and drain out from it onto the surrounding plain. The karkurs at the western end are wider and longer ; Karkur Ibrahim runs for five miles or more into the heart of the mountain. Here the mountain sides, a mass of huge rounded boulders, fall steeply into the flat plain below. On the east the karkurs are narrower and less accessible. To reach the pools in Karkur Murr one has to scramble for a mile or more up a boulder-strewn gorge. The sandstone cliffs in the centre rise sheer from the foothills for six to seven hundred feet. (PLATE III).

Hassanein called his book ' The Lost Oases : 'Uweinat and Arkenu ', and on recent maps 'Uweinat has often been named an oasis. But ' oasis ' is a misleading word, especially if one thinks of it in terms of the other Libyan oases of Siwa, Kharga, Merga and the rest. The true oases of the Libyan Desert derive their water from artesian supplies, and rain, which falls seldom, contributes nothing to their habitability. The water at 'Uweinat is due to rainfall which percolates through the mountain to collect in a number of rock-pools at the foot. Prince Kemal el Din records eight water-points ; of these 'Ain Duwa at the southwest corner is most easily reached and has the best water. In 1932 at least two, and probably more, of the others were dry.

In the tree-trunks and branches piled up in the karkurs of 'Uweinat and in the gorge which cuts deep into Gebel Kissu there is evidence of heavy though probably infrequent rainstorms. The karkurs issuing from the south and west of the mountain drain away southwestwards towards the dune-belt which crosses the plain on that side, and here are formed a number of shallow mud-pans which carry

a thin growth of acacias and grass. According to native report these basins were flooded to a depth of six feet or more after the heavy rains of 1927.

But 'Uweinat has received little rain of late years and has been undergoing progressive depopulation. Arkell's informant found there 250 Tibbu and Feizan. Hassanein writes of a population of 150 in 1923 ; when we visited 'Uweinat in 1930 there were said to be seven men there and at Arkenu, and in 1932 we did not find a soul. The numbers depend upon the grazing and so upon the rainfall, which is uncertain in the extreme. In years of good grazing the Tibbu are said to drive their camels into the narrow valleys, block up the mouth with stones, and leave them to feed there alone for three months.

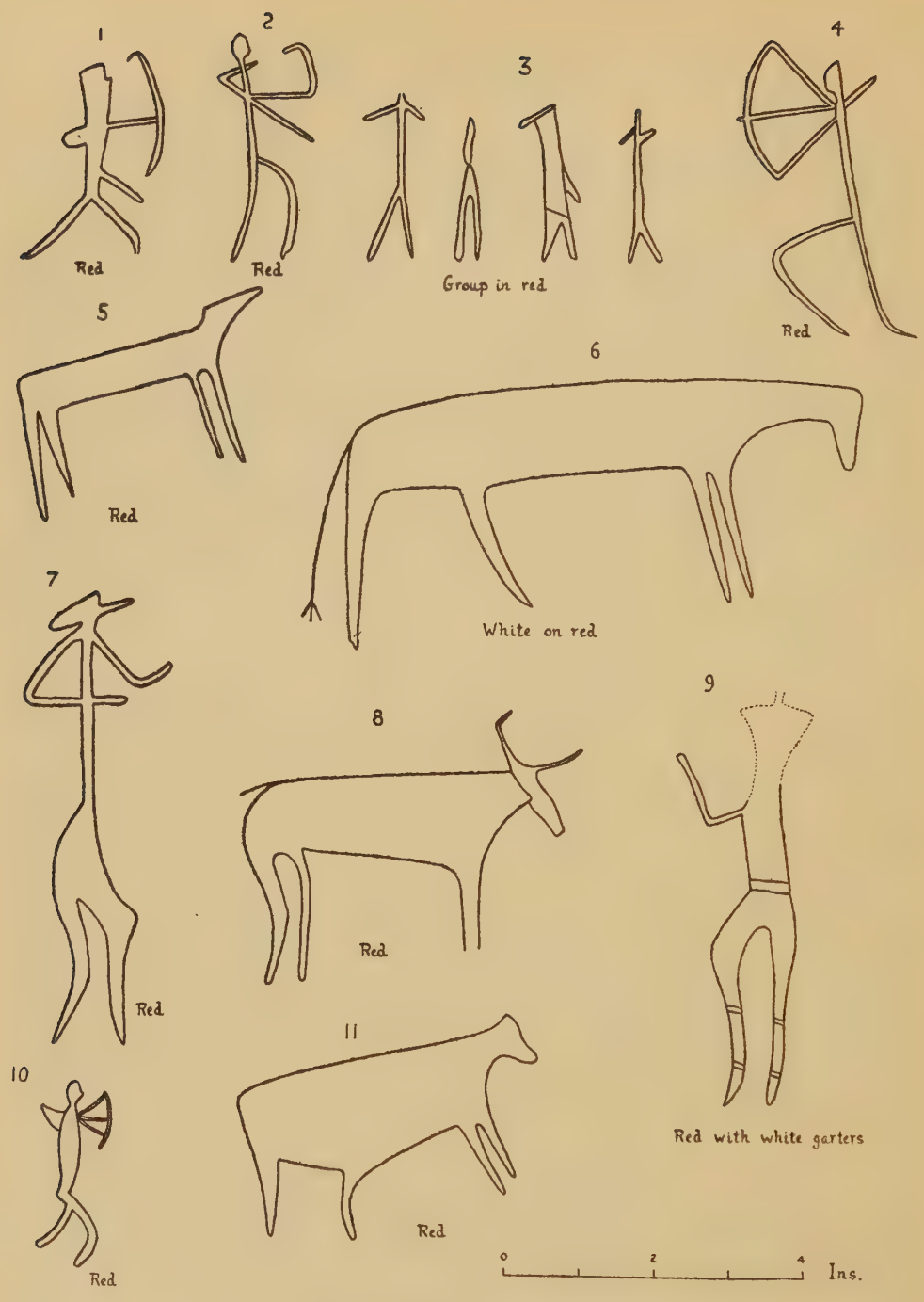
The vegetation is meagre and confined to the karkurs and the mud-pans on the surrounding plain. A few acacias, some grass and drought-resisting herbs are all that the slight rainfall can support. Though 'Uweinat rises to more than 6000 feet above sea level it is not well enough watered to have a montane vegetation such as is found in the Red Sea Hills or on Gebel Marra in Darfur.

To the archaeologist the chief interest of 'Uweinat lies in its rock-pictures, of which a number of groups have been found varying in technique, subject and age. L'Abbé Breuil[6] regards them as of exceptional interest and importance. The pictures are usually found on rocks at the sides of the karkurs. There are two distinct types, paintings in red or white colouring and designs scored on the rock faces. Hassanein was the first to record them and gives in his book a photograph of a group in Karkur Ibrahim at the west end of the mountain. Some years later a further series of pictures was found by Prince Kemal el Din in Karkur Talh on the northeast, and others, unnoticed or unpublished by the Prince, were discovered in the same karkur by Major Bagnold during our expedition of 1930. These pictures and a new group from Yerguehda Hill 50 miles south of 'Uweinat, which we found on our second journey in the autumn of 1932, are published here for the first time.

Notes on the Illustrations

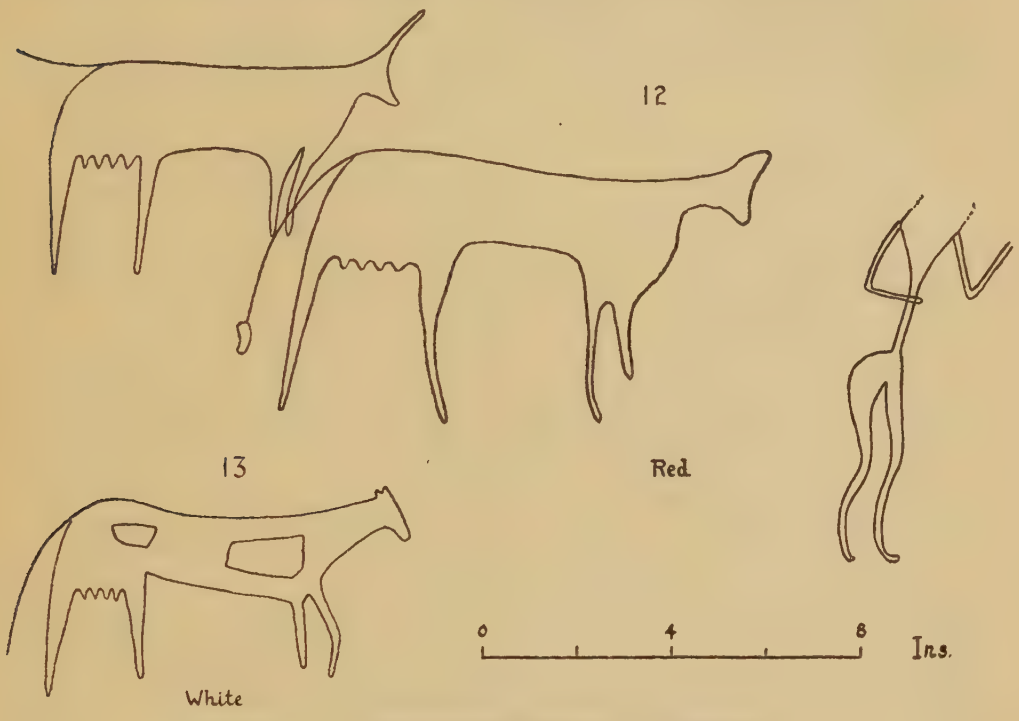
Figs. 1–13 are on the ceiling of a low rock-shelter in the sandstone on the east side of Karkur Talh (plate II). The site is far up from the mouth of the karkur, which emerges on the north side of the

[6] *Revue Scientifique*, Feb. 1928.



FIGS. 1–11. ROCK-PICTURES, KARKUR TALH, 'UWEINAT

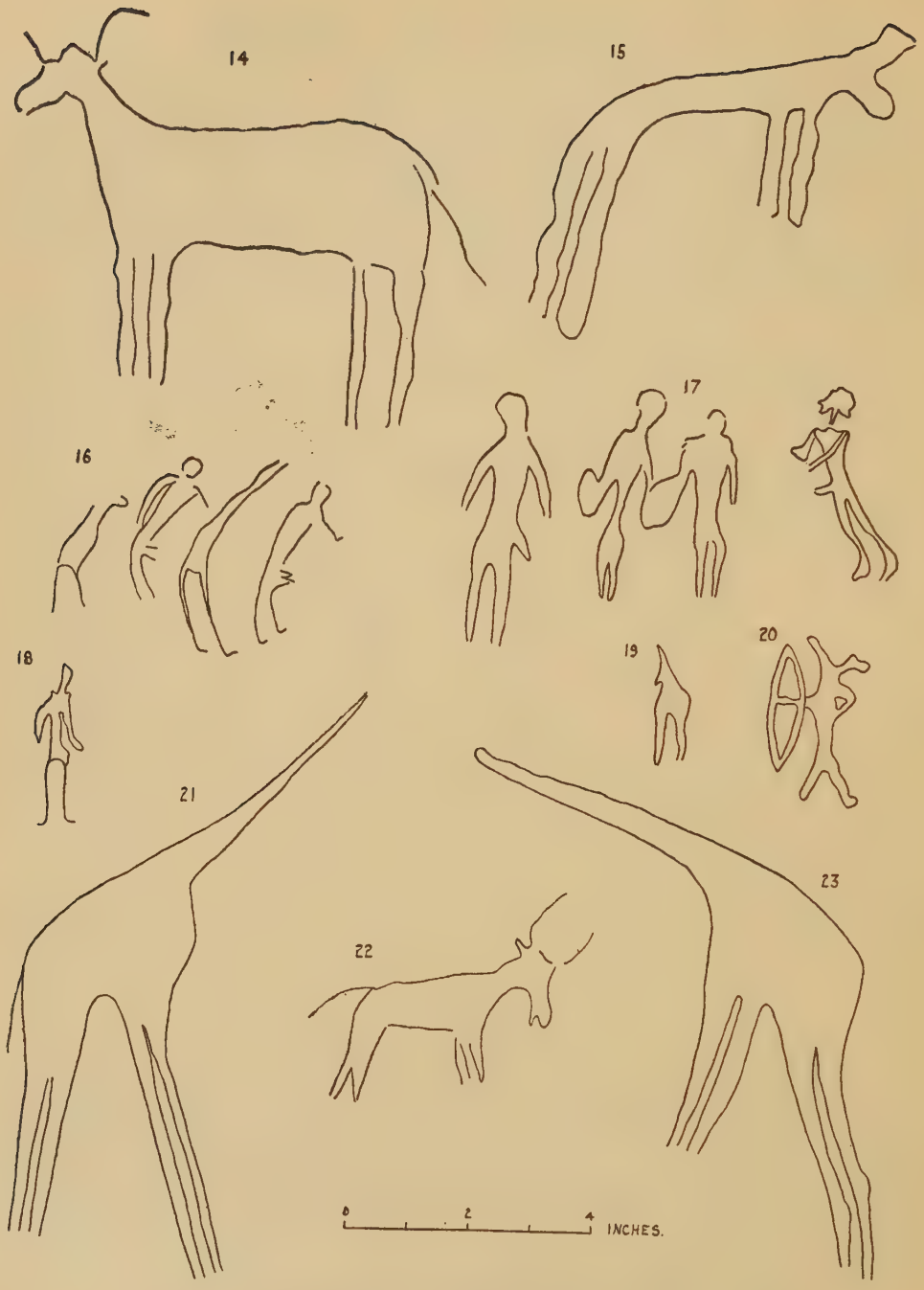
mountain. The roof of the shelter is about three feet high and the paintings can only be seen by crawling in and lying on one's back. They were thus very difficult to photograph and are reproduced here as line drawings though actually they are done in a red or white colour which fills the interior of the design. There are about 90 pictures at this site of which 40 are in red, 35 in white, and 15 in both colours, usually red below with white painted over, sometimes in spots.



FIGS. 12–13. ROCK-PICTURES, KARKUR TALH, 'UWEINAT

The animals in no. 12 closely resemble paintings found elsewhere in Gebel 'Uweinat by Prince Kemal el Din and in which Breuil notes points of similarity both to the Bushman pictures of South Africa and to those at Minateda in Eastern Spain. The paintings should also be compared with those found at In Ezzan* in the Sahara southeast of Ghat. Here again are resemblances to the Spanish and also to the Bushman art. There are similarities in our 'Uweinat pictures to those

* See ANTIQUITY 1927, I, 353–5.



FIGS. 14–23. ROCK-PICTURES, YERGUEHDA HILL, 'UWEINAT

of In Ezzan, such as the trident-ended tail of no. 6 and the treatment of the head in no. 7. The garters and waistband of no. 9 may be paralleled in South Africa, though the 'Uweinat picture lacks the spirited presentation which is found there.

Many styles and periods are represented in the pictures discovered at 'Uweinat by Prince Kemal el Din ; the paintings we found in 1930 seem to be akin to those for which Breuil suggests an Upper Palaeolithic date.

FIGS. 14–23 illustrate the paintings from Yerguehda Hill. This is a conspicuous hill of igneous rock which rises abruptly out of the plain 50 miles south of 'Uweinat. In the shelter of an overhanging ledge

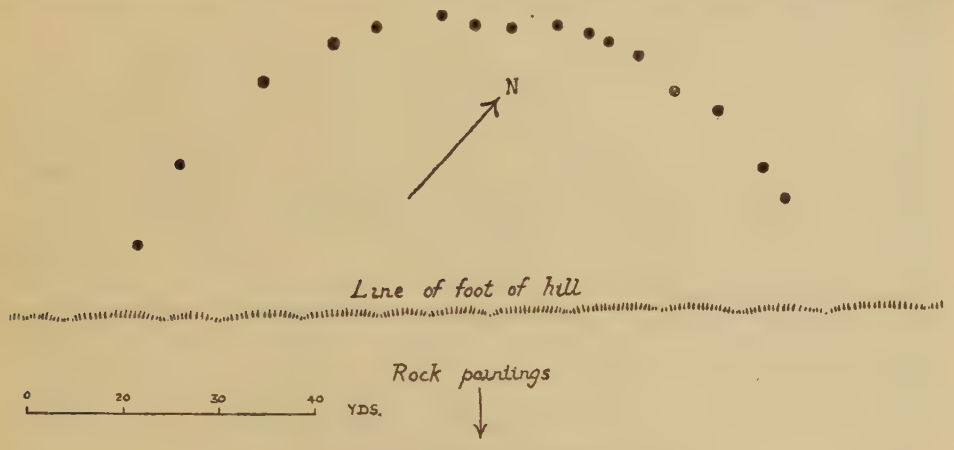


FIG. 24. STONE PLATFORMS, YERGUEHDA HILL

about 50 feet up on the north side of the hill Bagnold found the pictures reproduced here. They are painted on the rock face, mostly in red but a few in white pigment, and depict humans, giraffes and other rather indeterminate animals. They are not very well preserved, probably because they face north and thus are exposed to the prevailing sand-charged winds. In style the two giraffes are not unlike those discovered by Hassanein at 'Uweinat, though the latter instead of being painted are scored in the rock. Apart from this there is little resemblance between the groups at the two hills. The bowman, no. 20, with his plumed headdress, recalls in its subject though hardly in its execution the plumed Libyans of the Egyptian reliefs.

We made an interesting discovery at the foot of Yerguehda Hill. Here, below and apparently oriented to the site of the paintings, was a

rough semicircle of low stone platforms (FIG. 24). The stones, of sandstone and igneous rock mixed, were laid like 'crazy' paving each patch being 2–3 yards in diameter. There were some 16 platforms in all, at varying intervals of 5 to 25 yards apart, with the two centre ones set in a little from the others. Digging below one revealed nothing and the ground seemed undisturbed. When leaving Yerguehda Hill we noticed similar platforms at the west end of the hill. Around the semicircle Dr Sandford[7] found minute implements reminiscent of late palaeolithic African workmanship.

It is difficult to suggest an explanation of these platforms, perhaps a circle of fire hearths is the least improbable. Bovier-Lapierre records small stone hearths at neolithic stations near Baharia Oasis. He remarks that the hearths are often regularly disposed around the site.[8] A few miles north of the small oasis of Laqiya Arba'in we came upon a circle, 12 yards in diameter, of some 20 isolated stones about 12 inches high set up on edge. Nearby were small heaps of stones firmly embedded in the sand with an ashy layer beneath. There is no proved connexion between the rock-paintings and the platforms and implements but their relative position is suggestive.

Not many travellers have visited 'Uweinat or have stayed there more than a few days, but its position, its vegetation though meagre, and above all its water in a very thirsty land must have made it always a place of importance. There can be little doubt that a careful exploration of the mountain and its surroundings would add much to our now scanty knowledge of the history of the Libyan Desert.

[7] *Geogr. Journal*, Sept. 1933, 220. [8] *Bull. Inst. d'Egypte*, T. XII, 127.

PLATE I

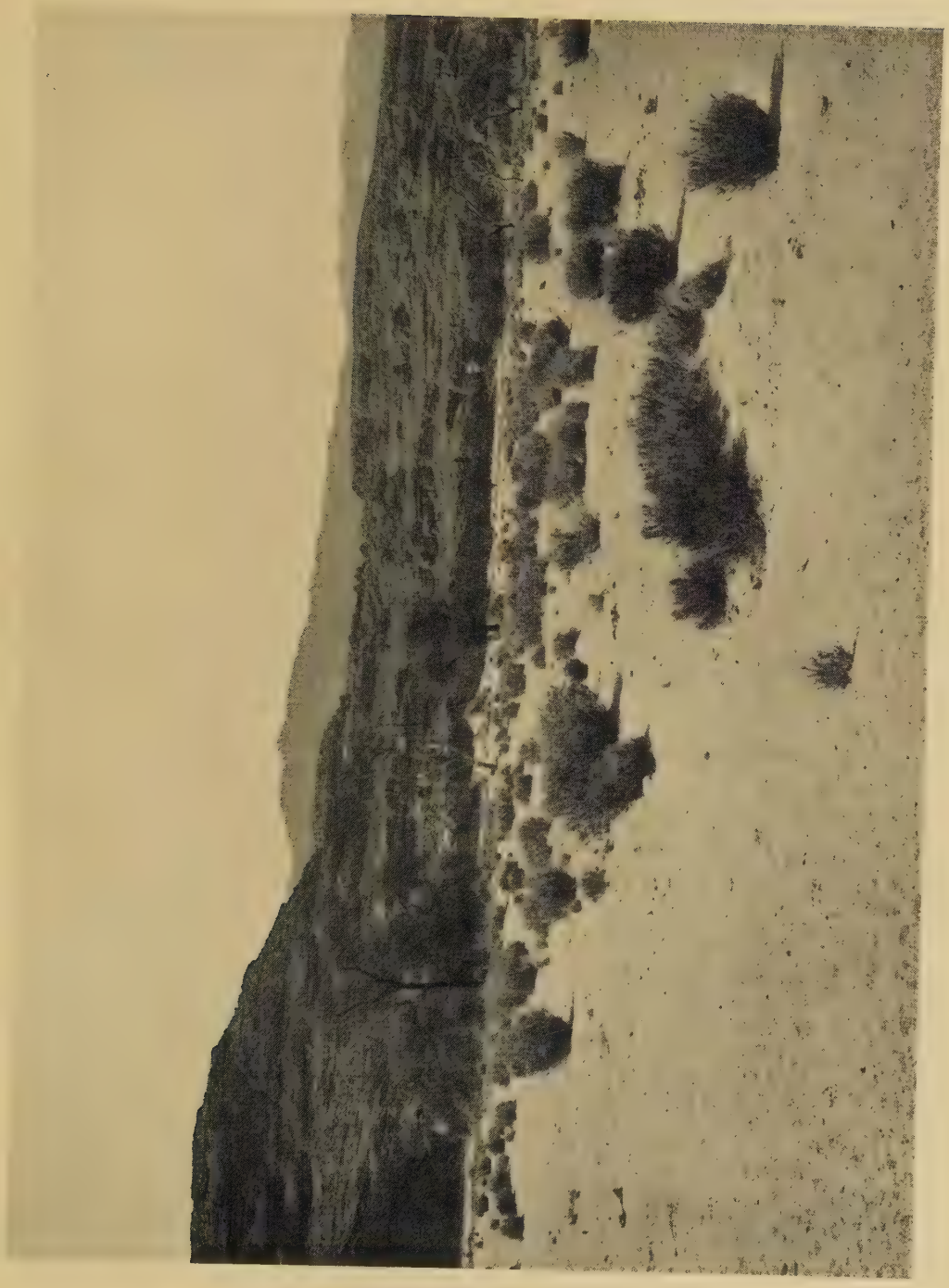
GEBEL KISSU. (*See* p. 66)
Ph. D. R. Paterson

facing p. 72

PLATE II

KARKUR TALH AT GEBEL 'UWEINAT. (*See* p. 67)
Ph. W. B. K. Shaw

PLATE III



GEBEL 'UWEINAT. (*See* p. 66)
Ph. K. S. Sandford

The Nine Huntings

by Iorwerth C. Peate

IN his appendix (pages 84–5) to his *Changes in the Fauna of Wales within Historic Times*, Mr Colin Matheson,[1] refers to ' the old Welsh text known as *Y Naw Helwriaeth* or *The Nine Huntings* [which] has been generally regarded as setting forth the hunting customs among the early Welsh '. This text has been published in the *Myvyrian Archaiology* (2nd edition, pp. 872–3) and in Dr John Davies's *Dictionarium duplex* (1632). Both these printed texts however differ in various details from the three known manuscript versions, and while the versions of two of the manuscripts are fairly similar, that of the third differs markedly from the other two. An edition with annotations in Welsh of the three manuscript texts was published (for the first time) by the present writer in 1933.[2] It was thought that since the texts presented problems of interest to students of British history, a collated translation of the two texts together with a translation of the third, and differing, text would prove to be of value to those unacquainted with Welsh.

The three texts are those of Peniarth MS 155, now in the National Library of Wales (A) ; Additional MS 31055 (R 32) now in the British Museum (B) ; and Hafod MS 3, now in the Cardiff Public Library (C). Text A is written in a hand which can be dated to the years 1561–2 ; B was written by Sir Thomas Wiliems, 1594–6 and C dates to the early years of the 17th century. As Matheson has pointed out, the earliest text ' dates only from about 1560 : it cannot therefore be implied, as has sometimes been done, that it *proves* the former existence of the Bear in Wales '.

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[1] The writer is indebted for several suggestions to his colleagues, Mr Colin Matheson, Keeper of the Department of Zoology, Mr H. A. Hyde, Keeper of the Department of Botany, and Mr Alfred Thomas, taxidermist, in the National Museum of Wales. In the preparation of the texts, the valuable assistance of Mr G. J. Williams, University College, Cardiff, is gratefully acknowledged.

[2] *Bulletin of the Board of Celtic Studies*, VI, 301–12.

The Nine Huntings raises several problems of importance. Text C refers to the Statute of Gruffudd ap Cynan (died 1137) and to ' a hunting statute of the times of the kings '. But the Statute of Gruffudd ap Cynan as handed down to us has no reference to hunting. Parry[3] suggests that the texts of the statute are ' broken fragments of different traditions originating from different periods '. Can this hunting code be related to Gruffudd ap Cynan or to his period ? It is a problem which at present admits of no solution. There are similarities, it may be noted, between parts of the texts of *The Nine Huntings* and parts of the Welsh Law texts : *cf.* for instance the second part of A and B with folio 63 of Peniarth MS 37.

It seems safe to assert that *The Nine Huntings* represents an old tradition : it was not a code in force at the time when the texts were written. It is supposed that the brown bear disappeared from Wales before the Norman conquest of Britain ; these 16th and 17th century texts however give a detailed description of the methods of hunting the beast. There is every reason for believing that this is a remnant of folk tradition, but it may be suggested that the text is a translation of an English code, the word *boar* being mistaken for the word *bear*. Such reasoning however seems inadmissible. As far as the writer can ascertain there is no known English original and, even if there were, the reasons given for hunting the bear—which would not hold for a boar-hunt—would have to be explained away. At the same time, it seems strange that in a Welsh hunting-code, the wild boar is not mentioned in one of the nine huntings, although the boar figures prominently in early Welsh literature. And although the hunts are classified, in true Welsh fashion, in triads, reference is made to *four* ' chief venison ', that of the boar being third and the bear fourth.

The phrase ' cock of the wood ' raises another problem to which Matheson also refers. Was this bird the capercaillie? Edward Lhuyd (v. John Ray, *Synopsis Methodica Animalium*, 1693, pp. 213–4) and John Davies (*Dictionarium duplex*), two expert Welsh scholars of the 17th century, translate it as *phasianus*. But in a poem by Gruffydd Hiraethog, who lived in the 16th century, as well as in a poem in an unknown hand (Peniarth MS 11) ascribed to about 1500,[4] the common pheasant is referred to as *ffesant*, not *ceiliog coed* (cock of the wood).

[3] *B.B.C.S.*, v, 25–33.

[4] The writer is indebted to Mr Ffransis G. Payne of the Carmarthen Museum for this second reference.

The poet referred to describes the *ffesant* or *ffesont* as being of ' sixty colours with the gold showing through red . . . a medley of moving colours '. He mentions its ' gold bars and the golden broom upon its breast '. This is of course the pheasant which this poem shows to have been a late-comer to Wales. ' Under trees or in bushes ', states the poet, ' there have never been any [pheasants] in Merionethshire. But now in the Llanddwye district they fill every place '. But even if the pheasant had been known in Wales long before 1500, it is unlikely that it would have been hunted with hounds, and it seems certain that the term *phasianus* was used by Lhuyd and Davies in its general generic sense.

It has been suggested that the cock of the wood was the woodcock but—apart from the fact that Dafydd ap Gwilym (late 14th century) and George Owen[5] refer to snares and nets for hunting the woodcock—the argument does not hold since the woodcock has a well-established Welsh name, *cyffylog*. It is unlikely too, that such a good naturalist as Lhuyd (or indeed Davies) would name the woodcock which is so unlike the pheasant family, *phasianus*.

Matheson suggests that the *ceiliog coed* was the capercaillie. The capercaillie's English name before the Gaelic form found favour was ' Cock of the Wood ' and Pennant—who knew his English far better than his Welsh!—states[6] that the *ceiliog coed* of the *Nine Huntings* was the Cock of the Wood. But he did not write from personal knowledge : he knew his Scotland where the capercaillie flourished. No remains of the bird have been found in Wales but bones were discovered on the Late Celtic and Romano-British site at Wookey Hole, Somerset. It is reasonable to suppose that it could be termed *phasianus* in the 17th century. Professor Alfred Newton, F.R.S., who was probably quite unacquainted with *The Nine Huntings*, describes the method of hunting the capercaillie on the Continent thus : ' The usual method of pursuing this species . . . is by encouraging a trained dog to range the forest and spring the birds, which then perch on trees ; while he is baying at the foot their attention is so much attracted by him that they permit the near approach of the master who thus obtains a more or less easy shot '.[7] This is indeed the method which *The Nine Huntings* suggests and the difficulty of shooting the bird even in the 20th century is in itself a sufficient reason for the use of hounds. It may be argued that

[5] *The History of Penbrokshire*, completed May 1603.

[6] *Tours*, II, 280. [7] *Dictionary of Birds*, 1896, 74.

its strong wings might take it out of the dog's reach for miles but it does not seem to take long flights and Pennant states that its ' nature is to sit perched on a bough where it will gaze till it is shot '.

The capercaillie feeds upon the young shoots of coniferous trees especially. But it is assumed that in these islands *Pinus sylvestris* is native only in Scotland and the problem arises : were there any conifers for the bird to feed upon in Wales in the period with which we are dealing ?[8] It is here that our Welsh evidence is helpful. Dafydd ap Gwilym, an outstanding 14th century poet, has a poem to the *ceiliog coed* in which he writes :

' Thou dost not need, chief jouster,
Food during the day time except *birch* and water.
Food from the shoots of the hillside birches,
Food for the hens from the green birches '.

Here is definite proof that the capercaillie fed on birch, and Sibbald[9] confirms this statement by referring to the bird's custom in Scotland of feeding upon *betula* as well as upon conifers. The same is true of the birds reintroduced into Scotland.

This statement by Dafydd ap Gwilym helps us to understand the reference to the capercaillie as ' one of the chief [or most important] game birds '. Those birds, which feed exclusively upon conifers, are practically uneatable, for as Newton states, their flesh smells strongly of turpentine and I am informed by those who have shot the bird that in some cases the birds have to be buried for some weeks to be rid of the smell. But when the food is birch this is not so, and the flesh is indeed a delicacy—so much a delicacy that probably it was over-hunted in Wales in medieval times until finally it disappeared.

Dafydd ap Gwilym's description is correct in all details. He describes the capercaillie as ' the brave cock with a black cloak, dancing, coral-browed. [The reference to " dancing " is obviously to its " play " or " spel ",[10] the poem itself is erotic]. Its tunic is of the same colour as the magpie's cowl . . . it wears a green chasuble and its wings [lit. armpits] are edged underneath with white '.

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[8] Jones, Yapp and Johns : ' The Salt Marshes of the Dovey Estuary ', *Journal of Ecology*, 1917, 27–103. Yapp enquires whether 'the living pine trees found on the moor today are the lineal descendants of the ancient pines of the buried forest (in the Dovey estuary) '. The writer thanks Mr E. Price Evans for this reference.

[9] *Scotia Illustrata*, 1684.

[10] Saunders and Clarke, *Manual of British Birds*, 806.

It seems definite therefore that the *ceiliog coed* of this hunting code is the capercaillie and that the code itself represents a hunting tradition dating back to the time of the Welsh princes.

The translation of the texts is as follows :—

MANUSCRIPTS A and B

These are the nine huntings which every man should know who sounds a horn. And whatever a huntsman who carries a horn is asked concerning these nine huntings, unless he reply satisfactorily concerning them, he who questions him can, by law, take his horn away. The three first are called common hunts, namely a stag, a swarm of bees, and a salmon : the second is called a hunt with baying, namely, a bear, a climber, and a cock of the wood : the third is called a hunt with cries, namely, a fox, a hare, and a roebuck. Why is it said that a stag is one of the three common hunts ? Because it is the finest and bravest animal in the world to be hunted by hounds and greyhounds. Secondly it is called a common hunt because it is shared between every man who may come upon it when it is killed, before the skin is drawn from the flesh. If a traveller happen upon it at that time, he shall have a share by law as well as he who killed it. The second common hunt is a swarm of bees. Whoever finds it too upon another's land or upon his own, it is still to be shared between those who come upon it before he sets his pledge, that is, to place a mark upon it to show that he found it first. Unless this is done, all shall share it by law except that iiijd must be given to the owner of the land. A salmon is the third common hunt when it is hunted and caught with a net or spear or in any other way. Whosoever shall come before it is shared shall by law be entitled to a part of it or of them as well as they who caught it.

Why is the bear one of the three hunts with baying ? Because it is the best venison in the world. And when it is killed, it is not much chased because it can walk but slowly and then it need only be walked off its legs and barked at and at last killed, and for this reason it is called one of the three hunts with baying. The climber is the second, that is, every creature which climbs to the top of the tree to defend itself. And no one should call or say ' wood cat ', ' pole cat ', or ' squirrel ', but call them, grey climber, black climber, red climber, and so should every huntsman refer to them and name them. And when a climber is chased it cannot flee far from the hounds but takes to a tree to defend itself. And there it is tired out and barked at,

and for this reason it is called one of the three hunts with baying. Why is it said that the cock of the wood is one of the three hunts with baying? Because it is one of the chief birds and when the hounds are upon its haunt they chase it until it takes to a tree and there tire it and bark at it. And for this reason it is called one of the three hunts with baying.

Why is it said that the fox is one of the three hunts with cries? Because it defends itself despite the shouting which follows it and the sounding of horns. It maintains itself until it begins to tire and therefore it is called one of the three hunts with cries. Why is the hare said to be one of the three hunts with cries? Because it keeps to its course and so defends itself though hunted and chased, and behold that is the reason. Why is it said that the roebuck is one of the three hunts with cries? Because it too maintains itself when hunted, like the hare and fox and that is the cause for so calling it.

These are the four chief venison, namely, stag, hare, wild boar, and bear.

Whosoever sets greyhounds at a stag or another animal when it is being hunted and the hounds follow it over a hill or climb out of sight, if the stag be killed the hound which was foremost when last seen gets the skin.

As for the hare, whatever hound kills it, the hound that raised it gets the hare by law or whatever raised it from its form, that owns it if it be wanted for hunting.

Also a grey-bitch does not get a skin though it win it unless it be pregnant from a greyhound which has won a skin, and if it be so, it gets the skin by law if it win it. Also none shall come into the field with his leash upon him unless he can give an answer concerning the nine huntings and if he come he loses the leash but if he give answer he can place the leash upon his arm without vengeance.

Also none shall loose a greyhound or bitch on to any animal when the hounds chase it unless his own hounds are already in the chase. And if such be the case he is free to kill the animal with greyhound or bitch. But if anyone loose a greyhound or bitch on to the animal without his hounds being in the chase, any one who follows the hounds can hamstring it if he bears its master ill-will, and that is law.

Also none shall shoot a hare, a young red deer, stag or roebuck or any hunted animal in the world when it is at rest. And whoever may do so forfeits his bow and arrow to the lord of the land but he may,

when the hounds chase the animal, shoot and kill it if he can, freely, though he is not to shoot amongst the hounds and greyhounds.

If anyone should happen to go hunting and begin loosing upon an animal, whatever animal it may happen to be, and idle dogs meet it and kill it, the dogs which first raised it shall have it. Unless the idle dogs are the king's.

This is the length [of time] that the first huntsman can claim an animal, until he turns his face homewards and his back to the hunt. While his dogs hunt and he has left his dogs, he can claim nothing if idle dogs kill an animal for the owner of the idle dogs shall own it.

These are the three things which cause the hounds to chase the stag better than any other animal in the world.

Namely, because it sweats so much, when it is hunted, that the sweat runs over its feet from its limbs to the ground, and when the hounds get this they become so joyful that they cannot leave the chase but from true enjoyment must get that sweat.

The second cause, when the stag is so tired that it can hardly walk it throws out white foam and when the hounds get this, they are still more joyful and follow it without stop.

The third, when the stag gives up the chase it throws out foam and blood mixed and when this is done, the hounds know it is finished and follow it until they come to it.

MANUSCRIPT C

Three common hunts[11]	Roebuck Fox Hare
Three hunts with cries	Wild stag Swarm of bees Salmon
Three hunts with baying	Wild bear Cock of the wood Climber

A climber is whatever animal which takes to a tree for defence, namely, wood-cat, pole-cat, squirrel ; and in hunting these wherever a company of huntsmen hunt a hare, and kill it, as eloquent[12] huntsmen

[11] Note the confusion here. The ' common hunts ' and the ' hunts with cries ' have been transposed.

[12] This is a sly hit !

do, to play fair with the Statute of Gruffyth ab Kynan in that place first [it must be] given to a pregnant woman and if [this be] not [possible] to whomsoever saw it lie and, if not this, to the huntsman who follows the hounds and, if not this, to the strange huntsman, and, if not this, to the greyhound whelp that was never out before that day and, if not this, to the first who laid hands upon it. And so it ends.

These are the chief points in the hunting statute made in the time of the kings of the Britons, ordered and ratified by royal authority.

Whosoever goes hunting to field or wood or mountain or forest and wear a horn on his right side and a leash across on the other, he must know the nine parts of hunting and name them and classify them. Anyone who challenges him must take his horn and his leash from him unless he can answer the points already mentioned, and the law shall be his authority.

Nine parts of hunting there are, namely :—

Three common hunts
Three hunts with cries
Three hunts with baying.

Read the remainder after this.[13]

[13] The reader should also consult John Lewis's *The History of Great-Britain* (London, 1729, but written a century earlier) where chapter XII deals with 'the Hunting of the Britains' in which *The Nine Huntings* is discussed.

Sidonius and His Times*

by The Editor

THE unique interest of Sidonius lies in the fact that he 'stands between the old world and the new, and is a witness for both of them' (p. 166). His letters are almost the only non-theological documents of the fifteen centuries which have survived; and this fact alone gives them a historical value that cannot be exaggerated. A critical and well-documented biography by one who has made the subject his own is therefore most welcome. In the following pages I do not propose to say more by way of commendation of the admirable biography by Mr C. E. Stevens, but rather to consider certain special points in it which are of current interest. Needless to say, the interpretation of the history of the period is my own, and the author would very probably dissent strongly from it.

Sidonius was born about 432 and he died between the years 480 and 490. He was a member of the Gaulish aristocracy, and although we are not told directly from what source he derived his income, we may infer that it was partly derived from rent of land, partly from the numerous official positions which he held at various times in his career. He appears throughout his life to have been 'in comfortable circumstances'; and whether as country gentleman, *praefectus urbi* or bishop, his interests were bound up with those of the class to which he belonged, and with its decaying and unreal classical culture (pp. 78, 82, 111, 177). He was himself fully conscious of his representative character, and of the consequent sterility of his Muse (p. 110). He left no successor and was 'the last of the Romans in Gaul, for with him the Roman tradition was broken' (p. 18).

His education was of the kind that dominant classes have always prescribed for themselves in such ages as this. 'The aristocratic class consisted of men with time hanging heavily on their hands, and they amused themselves with literature' (p. 14). They were taught to

* Sidonius Apollinaris and his age, by C. E. Stevens. *Oxford, at the Clarendon Press*, 1933. *pp.* 238, *with map and* 1 *plate.* 12*s* 6*d.*

imitate the style of ancient authors, both in the spoken and in the written word. ' Sidonius says, " pupils received instruction in epic, comic and lyric poetry; in history, satire, grammar, panegyric, philosophy, epigram-writing, and law " ' (p. 8). To these subjects may be added those of geometry, arithmetic and astrology (p. 7); and in vacation-time, hunting and fishing (p. 9). ' There is no hint in Sidonius' work that he received any religious instruction at all: the education of the lay-schools still remained a pagan education ' (p. 5).

An educational system such as this was in keeping with the culture of the age. ' Still fumbling at the ideas of centuries before, it was trying with ever diminishing hopes of success to illustrate them with a new turn of phrase ' (p. 111). It boasted that it lived in the past, and even apologized for ' trifling ' with affairs of the day (p. 6). ' The kindest criticism of 5th century educational principles would be that they set more store on the training of the intellect than on the intellect itself. It is no less true to say that they taught men to think and write and gave them nothing to think or write about ' (p. 16). What a cruel critic would say Mr Stevens does not tell us; perhaps he would compare 5th century education with our own. That such a comparison was present in Mr Stevens's mind is, however, apparent from his reminder ' that there are [today] school debating societies in which it is forbidden to discuss politics or religion [which] shows that the practice of debating on subjects removed from actuality is still recognized as a part of education ' (p. 13). He might have added that the prohibition is not confined to those of immature age, but has a much wider extension.

I have spoken of the ' culture of the age '; but it should be remembered that the basis of this culture was an exceedingly narrow one. It was confined to the members of a small class who formed numerically but a tiny fraction of the community. There had been a time when this fraction had held undisputed sway; but there were now two rival claimants for power, the Christian Church and the barbarians. The history of the 5th and succeeding centuries has hitherto been treated simply as a struggle between these contending parties. Indeed the character of the documentary evidence is such that any other method of treatment would probably fail for lack of material. Nevertheless it must not be forgotten that behind these conflicts there was ever present the mass of the people whose work, in field and workshop, made those conflicts possible. Over the bound and helpless body of these people, the Roman and barbarian rulers fought for the privilege of extracting surplus value, while the Church was busy organizing itself to make

the best of both worlds. The people of Lyons might be forgiven if they assessed the difference between Roman and barbarian mainly in terms of the capitation tax they had to pay. After the recapture of their town by the Romans ' the inhabitants were compelled to give hostages and the usual capitation tax was increased threefold ' (p. 45).

The rôle of the Church was a more subtle one. Christianity had undoubtedly begun as a movement of revolt from below, for the establishment of a new order of society on earth. It had long lost this character, however, and in Gaul in the 5th century the Church was firmly allied to the ruling classes, from amongst whom indeed many of its principal officers were recruited. Sidonius and his friends plainly regarded the Church as an organization which might help them to retain the power they were so rapidly losing. He speaks of ' holding the people of Gaul by religion, even if we cannot hold them by treaty ' (p. 159 ; *cf.* pp. 40, 113) ; and he himself ended his career as a bishop. It is an interesting question to what extent the policy of the Papacy consciously and deliberately aimed at prolonging, by other means, the supremacy of the Roman Empire. To what extent, for instance, was Augustine's mission an attempt to recover the lost province of Britain ? Was the Synod of Whitby in essence a subtly disguised conflict between Roman and barbarian ?

However this may be, there can be no doubt on which side of the barricades the Gaulish bishops were to be found. They were rich (' even in sixth-century Gaul a bishop could die leaving more than twenty thousand pieces of gold ', p. 122). They and the clergy were exempt from certain forms of taxation (*ibid.*). They lent money upon usury (*ibid.*). They sided with slave-owners against slaves (p. 139), and judged the conduct of master and slave by different standards of morality. Sidonius himself was a slave-owner, and he regarded the seduction of one of his own slave-girls by another man's slave as a ' wicked crime '; but in another instance, when the seducer was an aristocrat, there is no longer a word of ' wicked crime ' ; he congratulates his friend the seducer on having abandoned her and taken a legal wife (pp. 85, 86).

It was possible to become a bishop without graduating in the lower orders of the hierarchy, or by passing through them rapidly as a mere formality. Thus it was that Germanus, an army officer, and Ambrose, a civil servant, were recruited. Their functions were administrative, and as such were used, though never formally legalized, by the State (p. 115). They also acted as judges, food-controllers (p. 100) and jurists

(p. 158). The methods by which they were elected, though outwardly democratic, left the ultimate decision in the hands of the bishops themselves (pp. 123 ff.). In exercising this right of electing a colleague, due attention is given to the opinion of other members of the ruling class as regards the suitability of the candidate (p. 125).

In view of these facts Mr Stevens's description of bishops as ' spiritual rulers ' (p. 165) seems ill suited. The term ' spiritual ' indeed is a question-begging one at all times ; but unless it is held to cover the adoption of prayer as a military expedient (p. 152), there is little trace of ' spiritual ' activities to be found in the book before us.

The history of Christianity during the first five hundred years of its existence is, indeed, singularly like the history of social democracy. Both began as attempts to reconstruct society on a new basis ; and both eventually developed into institutions for maintaining the existing order of society. Christianity, however, had one great advantage over the later organization : whereas cheques drawn on the bank of social democracy are to be cashed (it is alleged) when it has achieved temporal power in this world, cheques drawn on the Church can never be cashed till the drawers are dead. They can never therefore be dishonoured. Perhaps partly for this reason, perhaps also because it had no serious rival, the Church managed to survive in spite of its complete change of front. There is indeed, throughout this life of Sidonius, hardly a trace of any ' subversive ' movements. What chance had peasant and slave against the forces organized on the other side ? The real trial of strength lay between Rome and the barbarians, and whichever side won, peasant and slave lost. The line of cleavage was not social but racial ; it was only social to the extent that it was a contest between ruling classes with different traditions and methods of exploitation. During this contest methods of barbarism were adopted, as they always are when a ruling class sees the prey slipping from its grasp; but they seem to have been used by Rome against barbarian and *vice versa*, not against the mass of people indiscriminately. Their strikingly modern flavour—the censorship of the post (pp. 78, 182), camouflage of murder (p. 58), death penalty for libel (p. 53), extraction of confessions by torture (p. 104), anti-Semitism (p. 136)—is therefore deceptive. Goth and Roman certainly feared each other less than certain modern rulers fear their subjects ; and so far as we can learn from Sidonius, the break-up of the Roman Empire in Gaul was peaceful compared with the collapse of modern European civilization.

Notes and News

THE ' AQUATILE BEAST ' OF NESS

Amongst all that has been written about the Loch Ness monster I have nowhere seen any reference to the earliest account of it (though I have not wasted much time on it, all told). This occurs in Adamnan's *Life of Columba*, which is one of the best historical documents of the Dark Ages, written before 704 and preserved in an almost contemporary early 8th century manuscript. The passage may be translated as follows[1] :—

' At another time, when the blessed man was staying for a few days in the province of the Picts, he had need to cross the river Nesa (*fluvium Nesam*). When he approached its bank, he saw some of the inhabitants burying an unfortunate man (*homunculum*) ; and as they were bearing him along he was snatched away by a certain water-monster (*aquatilis bestia*). The unfortunate man's body was snatched back, though too late, by some people who came up in a boat and seized it with hooks (*porrectis praeripuere uncinis*). The blessed man, on the other hand, hearing this, ordered one of his companions to swim across and fetch a boat moored on the opposite shore. Hearing this command of the holy and august (*praedicabilis*) man, Lugneus Mocumin complied without delay and leaving behind his clothes except the tunic cast himself into the water. But the monster (*bellua*) which, far from being satiated, was on the contrary rather aroused for prey (*in praedam accensa*) was lurking in the depths of the river ; and when it perceived the water above it to be disturbed by the swimmer, it suddenly emerged and swam towards him with a mighty roar and gaping mouth. All who were present, barbarians as well as brothers (*i.e.* natives and monks), were exceedingly terrified ; but the blessed man raised his holy hand and outlined (*pinxisset*) the saving sign (*signum salutare*) of the cross in the empty air, and calling on the name of God, commanded the fierce beast, saying, " Come no further and do not touch the man ; return quickly

[1] Original printed in W. Reeves's *Adamnan*, 1857, 140–2 ; J. T. Fowler's *Adamnan*, revised edition, 1920, 142–3 (Book II, chapter 27).

back again ". Then indeed the beast, hearing the holy man's word, fled back trembling in swift retreat, as if it were withdrawn by ropes. Before this he was so near to Lugneus that only the length of a pole (*contuli*) separated the man and the beast. The brothers, seeing the beast retreat and Lugneus their comrade (*commilitonem*) returning to them safe and sound in the boat glorified God in the blessed man with great wonder. But the barbarous natives (*gentiles barbari*) also who were present were forced by the greatness of the miracle which they had seen themselves to magnify the God of the Christians '.

The identification of the river Nesa with the river flowing into the sea at Inverness may be regarded as quite certain.[2] The legend of the Loch Ness monster is therefore at least 12 centuries old. What can have given rise to it? My own opinion, based upon investigations carried out by *The Illustrated London News* (January 1934, pp. 39–41), is that the monster originated in a floating log. It should be observed that, in the story, the monster haunts the *river*, not the lake ; and that floating logs and tree-trunks are exceedingly dangerous to small craft in a rapid torrent. They would be of common occurrence in a river issuing, as does the Ness, from a long lake with precipitous tree-covered banks. Actually such a log was mistaken, by one recent observer, for the monster ; and it was only when he brought his binoculars to bear upon it that the error was rectified.

The Ness is not the only river in which monsters occur. Reeves[3] quotes other instances, all in Ireland :—Lough Ree (Colgan, Acta SS, p. 790[a]) ; Drumsnatt, co. Monaghan (Flem. Collect. p. 372[b]) ; Banagher, Londonderry (Breviary of Aberdeen, Propr. SS. Part. Hyemal. fol. 101bb, lect. 7). O.G.S.C.

CYPRUS MUSEUM EXCAVATIONS (PLATES I–II, p. 88)

The archaeological work undertaken by the Cyprus Museum in 1933 has been marked by an important discovery, that of an extensive neolithic settlement near the village of Erimi, 10 miles west of Limassol, at a distance of 3 miles from the south coast of Cyprus.

Until a few years ago, the Stone Age in Cyprus was practically unknown,[1] sites belonging to this period not having been discovered. Nevertheless Dr E. Gjerstad found a neolithic settlement near

[2] See Watson, *Celtic Place-names of Scotland*, 1926, p. 77.

[3] Adamnan, 1857, 140, note c.

[1] See J. L. Myres, *Handbook of the Cesnola Collection of Antiquities from Cyprus* (New York, 1914), p. xxviii.

Phrenaros, in the Famagusta district and cleared a house in which neolithic flints were found,[2] though no sign of pottery could be traced. The same archaeologist carried out excavations on a large scale in Cyprus as leader of a Swedish Cyprus expedition, which discovered more sites belonging to the neolithic age :—(*a*) at Kythraea northeast of Nicosia ; (*b*) at Lapithos near the north coast and (*c*) at Petra tou Limniti, a small island off the northwestern coast.[3] The sites of Kythraea and Lapithos yielded pottery of painted and unpainted types.[4]

By these discoveries, the existence of a Stone Age in Cyprus was definitely established, though material of any extent for the study of this culture was lacking.

The pottery discovered on the two sites mentioned consisted only of potsherds, very few whole vases having been made up, and these of the unpainted class of ware. Material for the study of the origins and the evolution of this important culture was hoped for, and the discovery of the neolithic settlement of Erimi should greatly elucidate the problem.

Erimi stands on the left bank of the torrent Kouris, which carries rainwater from the Troodos mountains to the sea. The last hills of the southern side of these mountains are seen in the distance. Not far from the right bank of Kouris is the magnificent rock of the Acropolis of Curium.

Excavations began last April and continued until June. A trial dig had revealed several superimposed layers and during this season work was directed towards the clearing of a limited area of the settlement and then to the deeper strata. At the end of the season we were able to advance to the depth of 2 metres, through which four distinct layers were laid bare ; next season's work will be devoted to the clearing of the succeeding layers down to the virgin soil.

Each of the layers was distinguished by a separate house of a circular type. All the four layers yielded a large amount of pottery, mostly of a painted type, stone and flint implements, steatite ornaments, terra-cotta figurines and other objects of stone or clay.

The first layer house was uncovered at a depth of 40–50 centimetres below the surface of the earth. It was circular, measuring 6 metres across, with a substructure wall built of irregular stones. The entrance

[2] *Antiquaries Journal*, January 1926, VI, p. 54 ff. [3] JHS, 1929, XLIX, 237 ff.

[4] E. Gjerstad, *Union Académique International : Classification des Ceramiques Antiques*, classification 16 p. 1, 2 and *Catalogue of Vases in the British Museum*, I, part 1, page 15, no. A75, fig. 23.

was at the southeast and the interior was divided into several parts, which may have suited the various needs of life. Immediately inside the entrance, on the right, was a circular raised construction which was the hearth. The place where the grain was ground was marked by a mortar and pestles which were still *in situ*.

This first-layer house was built exactly over another circular house which had been destroyed by fire. This was simpler and had a hearth of simple type and an oval concrete area which may have served as the sleeping place. This second house yielded a magnificent pithos (PLATE I) with flat base, convex sides and decorated with a wonderful pattern painted in red, sometimes turning to brown.

A third-layer house was uncovered underneath the two previous ones and partly outside them. This house was also of the circular type and was built in a similar way as the other two. In the centre there was a raised concrete circular area measuring 1 metre across with a round depression in the centre. This area sloped towards a large hole, with sides covered with mud. The use of the concrete area remains uncertain although it may have been used for grinding grain. The third house yielded abundant pottery, mostly of the painted type. The fourth house was in very poor preservation.

The pottery found at Erimi is for the most part painted. The clay is not well sifted but is hard-baked. The surface is covered with a very fine buff slip on which painted patterns are applied in red, which sometimes turns to brown according to the different degrees of baking ; the shapes are represented by pithoi with flat base and convex sides, deep bowls with flat base, hydriae with narrow neck and pointed base. The ornamentation is mostly geometrical in style but of a very elaborate character. The study of the stratified pottery finds will give us a complete picture of the evolution of this art through the Neolithic Age.

Besides pottery we found a large number of stone axe-heads and chisels, flint implements of all kinds, pestles, mortars, and a great number of small pendants in green steatite. Particularly interesting are some terra-cotta figurines of a very primitive style.

This important discovery will throw abundant light on the Stone Age culture in Cyprus. It shows that the great tradition in the creation of vases goes back to the Stone Age, during which the potters made vases of a wonderful technique and style.

The question of the date of the Erimi settlement will need careful examination. The year 3000 B.C. is usually considered as the approximate date for the end of the neolithic period and the beginning of the

PLATE I

NEOLITHIC WHITE PAINTED PITHOS FROM THE SECOND LAYER AT ERIMI
Height: 0.53 m. Diameter: 0.37 m. (*See* p. 89)

facing p. 88

LIMESTONE HEAD OF A VOTIVE STATUE FROM A TEMPLE AT POTAMIA, CYPRUS
The statue may have been dedicated to Apollo as the head reminds one of this God. (*See* p. 88)

metal periods, but this problem will be left until the excavations are completed, when it will be possible to draw definite conclusions.

Besides the work carried out at Erimi, the Cyprus Museum excavated a necropolis situated to the west of the Acropolis of Curium, near Episcopi, not far from the small church of Hagios Ermogenes.[5] In this necropolis tombs from the transitional period between the Late Bronze Age and the Iron Age have been opened. Besides these there were tombs of an advanced stage of the Early Iron Age and others which had two different burials, one belonging to the Early, and another to the Middle Iron Age. The type of the tombs was the square chamber rock-tomb preceded by a fairly long-dromos with steps cut in the bank wall. They contained vases of Cypro-Mycenaean workmanship and especially stirrup vases of Cypriot make. The British Museum excavated in 1895 Mycenaean tombs near the village of Episcopi[6] and the discovery of this new cemetery with traces of Cypro-Mycenaean culture is most interesting because it proves definite mixture of the two cultures, the Mycenaean and the Cypriot, in this part of the Island.[7]

The dromoi of the tombs belonging to the advanced stage of the Early Iron Age were pit-shaped with steps cut on the back-wall but with a curious feature : their bottom was covered with many layers of stones simply thrown in anyhow. The doorway was always at the side of the tomb and was closed with a large pile of small stones.

A third site, near the village of Potamia, in the Nicosia district, excavated last October–November, yielded important sculptures.

The site was that of a temple, which must have fallen into ruins in ancient times as nothing or very little could be traced of the foundations. The finds consisted of a number of limestone heads, torsos and other fragmentary statues of various periods from the archaic to Hellenistic times. The site is mentioned by Richter,[8] and is attributed by him to Resef-Apollo and Melqart-Herakles.

Some of the 4th century heads, which belong to votive statues, may be attributed to the god Apollo ; of these the most beautiful is illustrated here (PLATE II). It represents a young male figure crowned with a wreath and a diadem, below which appears a row of curls around the forehead. The workmanship shows evident influence of the sculpture of the Greek masters of the 4th century and is remarkable for its high level of artistic excellence.

[5] *Excavations in Cyprus* (London, 1900), p. 60. [6] *Op. cit.* p. 61.
[7] ANTIQUITY, 1928, II, 190. [8] *Cyprus, the Bible and Homer*, p. 18.

Besides the archaeological work described in these notes, the Cyprus Museum collaborated with M. Claude F. A. Schaeffer, the well known archaeologist and representative of the National Museums of France, in the Early Bronze Age necropolis of Vounous near Bellapais in the Kyrenia district. The Cyprus Museum undertook work in this necropolis in 1931 and 1932 with very important results,[9] which will be published in due course.

P. DIKAIOS,
Curator of Cyprus Museum and Director of the Excavations.

We are glad to see that the ' preservation, maintenance, discovery and examination ' of monuments in Cyprus will now receive the attention they deserve. A strong Committee has been formed to interest the public, to ascertain what is most necessary to be done immediately, and to collect funds. It is hoped that during this Spring Sir Charles Peers, President of the Society of Antiquaries and lately Chief Inspector of Ancient Monuments to H.M. Office of Works will be able to visit Cyprus and report for the information of the public. A letter from Lord Mersey, Chairman of the Committee, outlining the proposals, was printed in *The Times*, 31 January (p. 13). We warmly endorse the appeal (subscriptions should be sent to ' The Cyprus Monuments Fund ' at Lloyds Bank, 6 Pall Mall, S.W. 1).—EDITOR.

RACE AND CULTURE

Professor Childe's admirable protest against the prostitution of Prehistoric Archaeology as propaganda for political intolerance and his drastic cleansing of her pure features from the embellishments and false trappings which make a meretricious appeal to the German crowd, will be welcomed by all lovers of truth.*

He has called in aid as detergents the sciences of Heredity and Ethnology, themselves both undergoing the stern discipline of the laboratory, the former very young and not yet clear of her birth-stains, the latter already swaddled in old garments of somewhat doubtful quality.

The question however arises whether Professor Childe has not somewhat overstepped the limits of safety in accepting some of the

[9] *See* MAN 1932, 249 and 1933, 134 ; also SYRIA, 1932, T. XIII, p. 345 ff.

* See ANTIQUITY, December 1933, p. 410.

laboratory products as well-established and constant truths for universal application, and in stating them in such uncompromising terms as facts rather than present conclusions.

One may leave aside the bald statement ' Acquired characteristics are not inherited ' ; it is the prevailing belief, but negatives are hard to prove, and Professor Macdougall's rats cannot be altogether disposed of in a foot-note.

Professor Childe deprecates all idea of ' racial hygiene '—the improvement of man by breeding—because man is distinguished from all other animals by his very complex brain and nervous system and because he doubts if the qualities valuable in humanity are analogous to those valued in poultry. No doubt for a hundred reasons experiments in human breeding are impossible : but it is not clear that there is any ' false analogy ' between men and stock. The higher mental and moral qualities that are desirable in man are dependent on the physical structure of his brain and other organs which, however complex, must be subject to the same laws of heredity (whatever they may be) as the physical qualities of stock. At the same time it is quite true that these very qualities are the ones that Professor Childe so admirably insists are far more due to the ' pooled experience ' and ' social tradition ' handed down by speech and writing, than to any inherited differences in the germ-plasm of the varieties or races of man. And these differences must have been much diminished by the inter-breeding between the races ever since the end of the Ice Age.

But it is Professor Childe's view of the whole question of associated characteristics that one finds most difficult to accept. He seems rather grudgingly to admit that there may be correlation between tallness, fair complexion and dolichocephaly on the one hand and shortness, darkness and dolichocephaly on the other, but evidently doubts if these may be taken as distinctive of the Nordic and Mediterranean Races.

He states, what is again of course quite true, that in man very little is yet known about the rules of dominance and hardly anything about the linkage of genes, and goes on to quote, without context, Karl Pearson, ' When we come to associate mental and bodily characters we get no correlation whatever of prognostic value '—and concludes rather triumphantly ' That statement should brand anyone who talks of racial mentality as a charlatan '.

Now that there should be no such thing as ' racial mentality ', as ordinarily understood, is of course contrary to common observation all the world over : the statement must be meant to apply only to inherited

characteristics excluding all post-natal influences—and even this cannot be proved to be true.

Experiment being impossible Ethnology in this field must depend on observation; and careful observation, be it remembered, by men who have had ordinary scientific training, is as valuable outside a biological laboratory as within it, for the finer mental characteristics cannot be weighed and measured; the only value of the laboratory here lies in the proper handling of the records. The common observation for instance that red hair and hot temper often go together can be made by anybody who has to do with children or horses—the value of the laboratory would be purely statistical. Every student of Archaeology, which depends entirely on observation, must agree to this.

Considering the present state of ignorance as regards the linkage of genes, the old medical dictum that, where the laboratory findings do not agree with the clinical observations they must give way, seems sound to apply to the branch of Ethnology concerned with the association of physical and mental qualities.

Now whatever may be the case in the much-mixed population of Germany we are fortunate in these Islands, in spite of quite as much mixture, in having some districts left where groups of population are still fairly uniform in their main physical characteristics and mental and moral traits, and at the same time present a contrast sharp enough to enable them to be distinguished one from another.

Take the three most obvious :—

(1) The tall, fair dolichocephalic type of eastern England, least mixed probably in the fishermen of Scandinavian origin on the coast. Their mental and moral characteristics are energy, initiative and self-reliance, fair mental ability though rather slow, with practical good sense and straightforwardness.

(2) The short, very dark, mesocephalic rather round-headed upland Welshman—clever, active, quick in mind and body, disputative, irascible, musical and somewhat unstable and unreliable.

(3) The dark type of western and southwestern Ireland of medium or rather low stature and rather slender build, with black, straight hair and high and very dolichocephalic skull—the long barrow type—inactive, unpractical, dreamy, poetic, idealistic and credulous, thoughtful rather than clever, and agreeable rather than self-reliant.

Crosses between well-marked individuals of (1) and (3) are to be seen in Ireland, and between (1) and (2) are common enough in England. The families (all of course subject to the same post-natal environment),

are often large enough to produce one or two children with marked separate inheritance of the physical characteristics of only one parent. That such children more often than not inherit also the mental characteristics of that parent is, I think, a common observation of those who have opportunities of watching them—the parents themselves, the family doctor, the school teacher and, in adult life, their commanding officers and employers.

In fact I should venture to brand anyone who denies the frequent correlation between the mental and physical inheritance of such children as a bad observer.

Has the Hebrew no race-mentality that he has inherited with his prominent feature ? Are we on the strength of Professor Pearson's statement to give up all observations on structural physiognomy ?

The wide variety of physical types, with their correlated mentalities which have gone to make up the British people, has given us a great advantage in the rapidly increasing complexity of modern civilization by enabling us generally to find the right associated mental and physical characteristics to fit each fresh requirement—the right peg for the new hole.

But perhaps the Teutonic trait of self-satisfaction which is so well illustrated in Professor Childe's museum-invitation is an associated mental characteristic not entirely absent from our own national make-up.

J. P. Williams-Freeman.

THE HANGING BOWL IN IRISH LITERATURE

Mr C. E. Stevens sends us the following amusing contribution to the ' Hanging Bowl ' controversy, extracted from E. O'Curry's *Manners and Customs of the Ancient Irish*, vol. II, p. 56.

' At this time [circa A.D. 600], the Fileadh, or poets, were in the habit of travelling through the country . . . in groups or companies of thirty, composed of teachers and pupils under a single chief or master. In these progresses, when they came to a house, the first man of them that entered began to chant the first verse of a poem ; the last man of the party responded to him ; and so the whole poem was sung, each taking a part in that order. Now each company of poets had a silver pot which was called Coiré Sainnté, literally ' the pot of avarice ', every pot having nine chains of bronze attached to it by golden hooks ; and it was suspended from the points of the spears of nine of the company, which were thrust through the links at the other ends of the chains.

The reason (according to the account of this custom preserved in the Leabhar Mór Duna Doighré called the Leabhar Breac) that the pot was called ' the pot of avarice ' was because it was into it that whatever of gold or silver they received was put ; and whilst the poem was being chanted, the best nine musicians played music around the pot. . . . If their pot of avarice received the approbation of the man of the house in gold or silver, a laudatory poem was written for him ; but if it did not he was satirized in the most virulent terms that a copious and highly expressive language could supply '.

Mr Stevens adds that ' coiré ' is to be translated ' cauldron ' rather than ' pot '.

ANCIENT GLASS

Mr A. Lucas writes :—' With respect to Mr D. B. Harden's most interesting and valuable article on " Ancient Glass " in Antiquity, December 1933, p. 419, I venture to submit the following criticisms on two subsidiary points.

(1) The material termed *nitrum* by Pliny was not saltpetre (*i.e.* potassium nitrate) as stated (p. 419), but natron (natural sodium carbonate and bicarbonate). Although Pliny's story of the discovery of glass is certainly apocryphal so far as the date and place are concerned, the method given is a perfectly feasible one for accidently making a small quantity of glass and it is by no means so fantastic as it is often represented to be. Many of those who criticize it adversely, wrongly assume that the sand must have been wholly siliceous and, therefore, that only sodium silicate (which is not glass) could have been formed ; whereas it is highly probable that the sand on the shore of Phoenicia was a quartz-sand containing a considerable proportion of calcium carbonate, as does much of the sand on the northern coast of Egypt. Such a sand fused with natron will produce soda-lime-silicate, or true glass, a small amount of which might have been formed even by the heat of an open wood fire. Saltpetre and sand could not have formed glass under any circumstances.

(2) The ancient Egyptians never employed vitreous glaze as a coating for clay as stated (p. 419). Such a glaze is only satisfactory on highly siliceous material and it will not adhere to baked clay (*i.e.* pottery) unless a layer of siliceous material is put on before the glaze. For pottery the glaze is usually either a lead glaze or a salt glaze, neither of which was used in Egypt in dynastic times. The body material of the ancient Egyptian faience was always powdered quartz and never

clay ; and the faience is not glazed pottery, as it is so frequently called, but glazed siliceous ware, a very important distinction '.

EARLY MAN IN EAST AFRICA

Recent discoveries of the remains of early man in East Africa have attracted considerable attention, and we have only refrained from reference to them because they were involved in controversy. To some extent that is still the case ; but a committee of fully qualified experts has considered the evidence for the remains of *Homo Sapiens* at Kanam and Kanjera and reported favourably upon them. Under these circumstances we have decided to print a statement in the words of the discoverer, Dr L. S. B. Leakey, whom we wish to thank for his courtesy in allowing us to do so. The following note is simply his general label attached to an exhibition of the finds themselves, which was recently displayed at the British Museum. It sums up the facts so well that we asked Dr Leakey to allow it to be printed here.

A word should be added about these temporary exhibitions at the British Museum, which are a new and altogether admirable feature. We understand that the main object is to provide accommodation for a short period (one to three months) for archaeological material which is of topical interest but not necessarily the property of the Trustees. It is particularly desired to exhibit new material from English excavations and little known material from private collections. But ' foreign ' exhibitions, such as this from East Africa and the existing one relating to Palestine, will also be included.

Dr LEAKEY says :—' Stone Age tools of the " Chellean " and " Acheulean " cultures have frequently been found in England and France, as in other parts of southwest Europe, and are well known. The typical tools of these cultures (together known as a " culture-group ") are " hand axes " (sometimes called " coups-de-poing "). This great " hand axe " culture with its two main divisions—Chellean and Acheulean—is first found in Europe in deposits formed soon after the beginning of the Pleistocene epoch, and it continues to the end of the " Middle Pleistocene ", having its final phases in the beginning of the " Upper Pleistocene ".

It has long been known that this great " hand axe " culture is found chiefly in the warm interglacial deposits of England and France, and is associated with the fossil remains of such warmth-loving animals as hippopotamus and elephant. It has also long been believed by many prehistorians that this culture came northward from some area which

was warm even during the glacial periods. Over the greater part of Africa, and especially North and South and East Africa, tools of this culture are exceptionally plentiful, a fact suggesting that the Chelleo-Acheulean culture had its centre of dispersal in Africa.

Until recently a complete evolutionary series of culture-stages had not been found anywhere in one place, though by making a composite series on the evidence of typology the evolution could be more or less accurately guessed. For example we have long known that the Chellean stage was the forerunner of the Acheulean stage, and at certain sites the subdivisions of the Chellean and Acheulean have been carefully worked out.

The great importance of the Oldoway site depends on the fact that there for the first time at a single site we have established upon both stratigraphical and typological evidence the whole series of evolutionary stages of this great culture, from its very crudest beginnings to its most highly evolved tools.

The eleven main divisions of the evolutionary sequence are exhibited, and it is very likely that, when the whole series has been fully studied, some at least of these main divisions will require further subdivision.

Another discovery in connexion with the work upon the " hand axe " culture in East Africa is that of skeletal remains associated with two of the eleven main evolution stages.

Human remains of great antiquity have been found from time to time in different parts of the world, but the makers of the Chelleo-Acheulean culture have always eluded us (if we leave out of count specimens of doubtful authenticity). This does not mean that human remains as old as the Chelleo-Acheulean culture have not been found ; indeed, early human remains such as the Piltdown and Pekin skulls *are* as old as the Chellean culture, and the Heidelberg jaw is at least as old as the Acheulean culture. But the Pekin skull is associated with a very early branch of the " flake culture " group and not with the " hand axe " culture ; while the Heidelberg jaw comes from an area which was never inhabited by the " hand axe " people, though early forms of the Levallois type of " flake culture " come from that locality. Similarly, with regard to the Piltdown skull, we must remember that at the date to which it is attributed the Chellean culture was not the only one in England. Other very early cultures such as the " Cromerian " (a " flake culture ") and the " Darmsdenian " (a pebble-industry) were also flourishing in England ; so that although the Piltdown skull has

often been considered as representing " Chellean " man, this is not absolutely proven.

Now from East Africa at a place called Kanam we have found a fragment of jaw of the makers of the pre-Chellean pebble-culture, while at Kanjera we have fragments of four skulls associated with the final stage of the Chellean culture ; so that at last we know something about the makers of the great " hand axe " culture '.

PERSEPOLIS

The special correspondent of *The Times* (20 November 1933), writes :—' What is considered to be the most important Achaemenean discovery of recent years has been made among the ruins of Persepolis by Mr Friedrich Krefter, assistant to Professor Herzfeld, the head of the Persian expedition of the Oriental Institute of Chicago University.

In the northeast and southeast corners of the Apadana of Darius the Great, which is 196 feet square, two cornerstones were unearthed on 18 and 20 September. The other corners were destroyed long ago. These cornerstones consist of flat stone boxes 45 cm. ($17\frac{1}{2}$ inches) square and 15 cm. (6 inches) deep. Each contained two foundation plates, one of gold and one of silver, 33 cm. (13 inches) square and $1\frac{1}{2}$mm. thick in perfect condition. Each plate is engraved with the same inscription in three languages, Old Persian, Elamite and Babylonian, which translated reads :—

> Darius, the Great King, King of Kings, King of the Lands, Son of Hystaspes the Achaemenid, Darius the King saith : " This is the kingdom over which I reign from the Sakas who dwell in the neighbourhood of Sogd as far as Kush from the Indus as far as Sparda, that has been granted unto me by Auramazda who is the greatest among gods. May Auramazda support me and my House".

Under each box were found four gold coins, staters of Croesus King of Lydia, and two silver coins ; one is an Aeginetan stater, the other is presumed to be Macedonian and bears a griffin. It is supposed that no example of a Daric was found because the cornerstones were probably laid early in the reign of King Darius, perhaps before he had struck his own coins '.

THE ANONYMOUS LIFE OF ST. CUTHBERT

This life is the one used by Bede and is therefore an early historical document of great value. It contains quite a number of place-names, and it was hoped that some of these might be used on the forthcoming

Ordnance Survey Map of ' Britain in the Dark Ages '. Before this could be done, however, two things were required :—The original manuscripts had to be hunted down, and the place-names identified. There are at present only two printed editions of the Life, that published by the Bollandists (*Acta Sanctorum*, March, vol. III) and that of Stevenson, which is merely copied from it. During a visit to Paris I unearthed and consulted a 14th century MS. in the Bibliothèque Nationale (Latin 5289). I subsequently discovered that Mr Bertram Colgrave, of Hatfield College, Durham, is at work upon a critical edition of the Life, and was of course aware of the existence of this Paris manuscript and several other fresh manuscripts. With great generosity Mr Colgrave not only raised no objections to my publication of the following note, but also added to it his own critical comments, with the readings of some of the other manuscripts. It seems desirable to publish the whole as soon as possible, so that those with a knowledge of the topography of Northumbria may be able to study the names, and perhaps identify some of them. Meanwhile I can only express my thanks to Mr Colgrave, and hope that the publication of his researches will not be long delayed.

Below is printed in parallel columns the text from *Acta Sanctorum* and the expanded reading of Paris, Latin 5289 (my reading being checked and sometimes corrected by Mr Colgrave from a photostat in his possession) :

Acta Sanctorum (*Mar. iii*).	*Paris, MS.* 5289 (*Latin*).
p. 118. iuxta fluuium, quod dicitur Leder.	fol. 49^{b}. iuxta fluuium qui dicitur ledir.
p. 118. Pergenti namque eo ab Austro ad flumen, quod Wir nominatur, in eo loco, vbi Leunckcester dicitur.	fol. 49^{b}. Pergenti igitur eo ab austro ad flumen quod wir nomina*tur* in eu*m* locum qui concarestir dicitur.
p. 119. Coloderbyrig.	fol. 50. Colodesbuc.
p. 119. Alio quoque tempore de eodem monasterio, quod dicitur Mailros, cum duobus Fratribus pergens, et nauigans ad terram Pictorum, vbi Mudpieralegis prospere peruenerunt.	fol. 50^{b}. Alio quoq*ue* tempore de eo dem monasterio q*uod* dicitur mauros[1] cu*m* duob*us* f*ratri*b*us* p*er*gens et nauigans ad terra*m* pictor*um* ubi dicitur niuduera[2] iregio p*ros*pe*re* pe*r*uenerunt.

[1] *sic*, for *mailros* elsewhere (*u* for il).
[2] The ' e ' written above the line.

p. 119.	sicut nobis vnus e duobus Fratribus supra, nomine Tydi, qui Presbyter est adhuc viuens coram multis testibus indicauit.
p. 119.	iuxta fluuium Tesgeta.
p. 120.	a quadam muliere, quae dicitur Kenspid, adhuc viuens.
p. 120.	quae dicitur Hruringaham.
p. 120.	insulam nostram, quae dicitur Lindisfarne.
p. 121.	insula quam Hy nominant.
p. 122.	Ex quibus est, quod cuiusdam Comitis Aldfridi Regis, nomine Heunna, in regione, quae dicitur Henitis habitans.
p. 122.	ad vicum, qui Bedesfeld dicitur.
p. 122.	proficiscens ab Hagustaldese, tendebat ad ciuitatem, quae Vel dicitur. Mansio tamen in media via facta est, in regione vbi dicitur Alise.
p. 122.	in quodam vico, qui dicitur Medilpong.
p. 123.	iuxta fluvium etiam quod dicitur Opide.
p. 123.	Eo tempore quo Egfridus Rex, Pictorum Regem depopulans.
p. 123.	sanctus Episcopus noster ad ciuitatem Luel pergens.
p. 123.	secundum id quod Paga, ciuitatis Praepositus, ducens eos reuelauit.
p. 123.	Hereberht, ab insulis Occidentalis maris.
p. 123.	in parochia eius, quae dicitur Osingadum.
p. 123.	fratrem quendam . . . qui adhuc viuens Pallistod dicitur.
fol. 51.	Sicut unus e duobus *fratribus* nobis sup*ra*dictis nomine tydi qui p*resbyter* est adhuc uiuens cora*m* multis testib*us* indicauit.
fol. 51.	iuxta fluuium tesgeta.
fol. 51^{b}.	a quada*m* muliere q*ue* dicitur coesuid adhuc uiuente.
fol. 51^{b}.	que dicitur runingaha.[3]
fol. 51^{b}.	insulam no*str*am que dicit*ur* lindisfaronee.
fol. 52^{b}.	insula q*uam* hii nominant.
fol. 56 & 56.^{b}	ex quib*us* est q*uod* cuiusda*m* comitis aldfridi regis nomine hemini in regione que dicitur hintis habitantis.
fol. 56^{b}.	ad locum qui bedesfied dicitur.
fol. 56^{b}.	p*ro*ficiscens ab hagustaldense tendebat ad ciuitatem q*ue* luel dicit*ur*. Mansio tantum in media uia facta est ei in regione que dicitur echse.
fol. 57.	in quoda*m* uico qui dicit*ur* mediluong.
fol. 57.	iuxta fluuium etiam qui tuuide dicitur.
fol. 57.	eo t*empore* quo ecfridus rex pictor*um* regionem depopulans.
fol. 57.	s*anctus* epi*scopus* no*ster* luel ciuitate*m* p*er*gens.
fol. 57.	se*cundum* id q*uod* uacha ciuitatis p*re*positus ducens eos reuelauit.
fol. 57.	Herebert*us* ab insula occidentalis maris.
fol. 57^{b}.	in parrochia eius que dicitur osingadu*m*.
fol. 57^{b}.	fr*atr*em quenda*m* . . . qui adhuc viuens ualhstod dicit*ur*.

[3] No sign to indicate omission of final 'm':

Mr Bertram Colgrave's comments are as follows :—

Lat. 5289, *fol.* 50b. (My original reading was NUIDUERA ; Mr Colgrave says :—) I am not convinced that the MS. reads Nuiduera. All the other MSS. have Niuduera, and although it is impossible to tell with certainty from my photostat, I *think* it is Niuduera. All the MSS. in the corresponding passage in the Life by Bede read either Niduari, Nidwari or Niduuari.

Fol. 51b. I have carefully examined my photostat of Paris 5289 and I am now convinced that it reads RUNINGAHA. The first two minims are slightly lower than those which follow, and the fifth minim has a decidedly thicker top. The Treves MS. (Treves 422) reads runingaham, and so also do the marginal notes to Bede's Life in Bodley, Fairfax 6 (late 14th century). The marginal note in Bede's Life, Brit. Mus. Harl. 4843 (15th century) reads nuningaham, due I believe to the fact that the scribe, who apparently copied Fairfax 6, mistook R for N. The marginal note in Bede's Life, Trin. Coll. Camb. O. 3.55 reads hruningaham. The two St. Omer MSS. read hruringaham, while the Brussels and Harl. 2800 omit it. Arras reads hruringaham, the ' h ' written above.

Fol. 56. HEMINI. I feel fairly certain that the 3rd and 4th letters are m, i. Treves has hemini quite clearly, Brussels and Harl. omit. The St. Omer MSS. and Arras all read hemma. The marginal note in T.C.C. O. 3.55 is, I think, Nomen comitis hemna, but my photostat of this MS. is not clear.

Fol. 56 HINTIS. Treves and Paris have hintis ; the St. Omer MSS. and Arras have kintis. The marginal notes in Fairfax, Trin. Coll. Camb., and Harl. 4843 have hintis.

Fol. 56b. ECHSE. Treves has Echse ; the two St. Omer MSS. and the Arras MS. read Achse, so this was probably the correct form.

Fol. 57. Treves and Paris have TUUIDE. Brussels and Harl. omit. Paris is the only MS. to read qui for quod. My impression of the Paris scribe is that he was somewhat careless. B. COLGRAVE.

It only remains for me to add to this joint note a list of identifications :—

LEDIR = R. Leader, a tributary of the Tweed, which it joins at Old Melrose, Roxburghshire.

WIR = R. Wear, Durham.

CONCARESTIR = Concacæstir ; Chester-le-Street.

COLODESBUC = Coludesburh, Urbs Coludi, Caer Golud ; St. Abb's Head, Coldingham. (A note on this name and site will be published in a later number).

MAUROS = Mailros ; Melrose.

NIUDUERA IREGIO = Niuduera regio ; unidentified, but no connexion with the R. Nith, Dumfriesshire, and probably on the East Coast of Scotland. See W. J. Watson, *Celtic Place-names of Scotland*, 1926, 175–7.

fol. 51. TESGETA = Tefgeta ; R. Teviot, a tributary of the Tweed which it joins at Kelso, Roxburghshire. Compare Tefegedmuthe, *Simeon of Durham* (Rolls ed.) I, 201.

fol. 51b. RUNINGAHA(M). Unidentified.

fol. 51b. LINDISFARONEE = Lindisfarne.

fol. 52b. HII = Iona.

fol. 56. HINTIS ; unidentified.

fol. 56b. BEDESFIED ; unidentified.

fol. 56b. HAGUSTALDENSE = Hexham.

fol. 56b. LUEL = Carlisle.

fol. 56b. ECHSE (or Achse) ; unidentified, but clearly a name applied to a district between Hexham and Carlisle.

fol. 57. MEDILUONG ; unidentified, but compare *Simeon of Durham*, II, 41, 52, 376 (Methel Wongtune), and Mawer, *Place-names of Northumberland and Durham* (Cambridge, 1920), p. 142.

fol. 57b. OSINGADUM ; unidentified.

fol. 57. TUUIDE = R. Tweed. This is the oldest mention of the name.

O.G.S.C.

SCANDINAVIAN CREMATION-CEREMONY

The bearing of the account of the cremation-ceremony, printed on pp. 58–62 of the present number, on problems of British barrow-burial will be obvious. When describing the excavation of a Bronze Age burial-mound at Roundwood in Hampshire I quoted the account of the funeral of Patroklos (*Proc. Hants. Field Club* 1927, IX, 190-2) by way of illustration. The erection of a wooden pole in the middle of the barrow, as described on page 62, is exactly paralleled by the remains of a central pole found in a barrow of the Late Bronze Age at Plaitford, Hants. (*Antiquaries Journ.* 1933, XIII, 425).—EDITOR.

Recent Events

The Editor is not always able to verify information taken from the daily press and other sources and cannot therefore assume responsibility for it.

'From a study of over two thousand sepulchral inscriptions recording ages, it appears that the average expectancy of life among the ancient Greeks must have been only about 29 years, as compared with about 55 years in our own country today for males and about 57 years for females'. (Bessie E. Richardson, quoted in *Amer. Journ. of Arch.* XXXVII, 116: a review of her book will be published later in ANTIQUITY).

The second meeting of the International Association for the Study of the Quaternary period in Europe was held at Leningrad in September 1932. Describing the exhibitions of which several are to become permanent, a well-known Polish archaeologist writes :—'They are evidence of an achievement that no European country can match. They are designed to enlighten those who seek instruction ; and, looked at from this point of view, it must be admitted that they achieve their purpose'. (*L'Anthropologie*, 1933, XLIII, 549).

The Trustees of the British Museum have acquired one of the oldest editions of the Bible for the sum of £100,000 (one hundred thousand pounds).

Sir George Macdonald has lost no time in extracting from the Falkirk hoard a number of conclusions of historical value. The hoard, found last August, is the largest of its kind discovered in Scotland, and consists of nearly 2000 silver denarii. The dates range from 83 B.C. to A.D. 230. The hoard began to be formed in the first quarter of the second century A.D. and it represents the family savings of four generations. It confirms the already known fact that the dwellers in Caledonia

used Roman denarii as a native currency from the time of the Agricolan conquest down to a date long after the final departure of the Romans from Scotland. (*The Scotsman*, 12 December 1933).

Excavations on the kopje of Mapungubwe, northwest Transvaal, subsidized by the Government and assisted by air-photography, have been very successful: but we are not told any details. (*African World*, 28 October 1933).

Those who imagine that North America has nothing to show the archaeologist should visit the ruins of Chetro Ketl, New Mexico, belonging to the period A.D. 993–1116. The stone masonry alone is marvellously good, and is evidence of no small degree of mechanical skill. (*Ill. London News*, 2 December 1933).

Causeway-roads apparently resembling those made by the Romans connected the Mayan cities of Yucatan. One such recently explored starts from a small pyramid at Yaxuna and runs almost perfectly straight for 43 miles. In width it varies from 30 to 34 feet, in height above the adjacent ground from 2 to 8 feet. It appeared that walls had been built across the road, as if to bar it against enemies. (*Nature*, 4 November 1933, summarizing the News Service Bulletin of the Carnegie Institute of Washington, vol. III, no. 9).

In the *British Weekly* (2 November 1933), Dr G. G. Coulton replies to a review of his book, *Scottish Abbeys and Social Life*, in the *Antiquaries Journal*, October 1933, pp. 483-6. The point at issue is, he says: What were the monks contributing to religious and social life during the last four or five medieval centuries ?

A new cave has been discovered at Chou-kou-tien, where *Sinanthropus* was found. The account of its contents has evidently been garbled in transmission from China, but the finds must be interesting if they are anything like the description. (*Sunday Referee*, 12 November 1933).

On Sutton Common near Burghwallis, not far from Doncaster, Yorks., are two adjacent earthworks. They consist of enclosures of unequal size, defended by ramparts, in some parts multiple. The superficial appearances were not unlike those of Roman camps, an opinion which seemed to be confirmed by the presence of a *titulus* (defensive bank and ditch) in front of one entrance, though rather far from it. The earthworks are marked on the Ordnance Map, but nothing definite is known of them and their age is quite uncertain. After seeing them during the winter of 1932–3 the Editor wrote to a correspondent in Yorkshire, with the result that a fortnight's digging was done there last summer by Professor Whiting, of Durham University, and Miss Kitson Clark.

The results so far are insufficient to prove the age. The larger earthwork was examined, and it was found that the earthen rampart had been preceded by a palisade of stakes. Traces of occupation were found inside the rampart, and remains of what is regarded as a rubbish pit were reserved for future examination. No confirmation of the Roman camp hypothesis was found, and both the excavators and others who saw the excavations are definitely against it. Work is to be resumed next summer, and it is much to be hoped that datable materials will be found.

The Eskimo origin and manufacture of certain carved stone lamps of quite excellent design has been proved by excavations at a village site in Kachemak bay, Cook Inlet, Alaska, conducted by the University Museum, Philadelphia, and the National Research Council. (*Ill. London News*, 21 October 1933, p. 655).

'About 4 years ago some very beautiful bronze objects, inlaid with gold and silver, malachite and turquoise, came into the hands of Chinese antique dealers in Honan, together with exquisitely carved jades which surpassed anything yet known in Chinese jades. They were traced to their source, which was found to be a group of eight tombs on the site of Old Loyang in West Honan, which was the capital of the Chou Dynasty during the latter half of its history, and is known as the Eastern Chou (770–249 B.C.)'.

The tombs were in pits, uncovered by any mound, and were revealed by a caving-in of the soil. They were cleared by ' professional tomb-excavators ' intent on gain, and the results were of course, archaeologically disastrous. Some idea of the character of the finds may be gathered from the fact that ' three small pieces of jade fetched £3,400 and one gold and jade object was said to have been sold ultimately for £5,000 ', prices rightly described as ' most exorbitant '.

An excellent account of the tombs is published in the *Illustrated London News* (28 October and 4 November 1933) by the Rt. Rev. William C. White, Bishop of Honan and head of the Canadian Church Mission. ' A preliminary record is now being published under the title " Tombs of Old Loyang " (Messrs Kelly and Walsh, Ltd., Shanghai) which describes the tombs and some 500 of the objects obtained from them. The Royal Ontario Museum of Archaeology in Toronto, where hundreds of these objects are deposited, has allocated a gallery specially to house these objects '. But who will go and excavate the tombs and retrieve such archaeological material as may remain unsabotaged ?

In the note on ' Catguoloph ' on page 479 of the December number of ANTIQUITY an instance of the place-name Wallop which could not at the time be located was referred to. This can now be given as that of ' Willop ', applied to two sewers on the level ground at the foot of Lympne, half a mile south of West Hythe (Kent 74 SW). The ' i ' makes any connexion with Guoloph most improbable. No early forms are available.

The earliest name of the region of Gwynedd (Northwest Wales) occurs in the Life of S. Samson in the latinized form Venetia (Codex Paris, Latin 3789, folio 145; ' 11th century'). The Life itself is very early, and the form quoted is in obvious agreement with this date, since spellings with gu- (guenet, guined, guenedotia) occur quite early. The passage in question is as follows :—' Et mater eius anna nomine deuenetia p*r*ouincia quae p*r*oxima e*st* eidem demetiae exorta e*st* '. Demetia whence Amon, Sampson's father came, was of course Devet or Southwest Wales.

Some Recent Articles

This list is not exhaustive but may be found convenient as a record of papers on subjects which are within the scope of ANTIQUITY. *Books are occasionally included.*

Races, peoples and cultures in prehistoric Europe, by V. Gordon Childe. *History*, October 1933, XVIII, 193–203.

A criticism of fundamental concepts in the light of existing knowledge.

The character of the Anglo-Saxon conquests ; a disputed point by R. V. Lennard. *Ib. id.* 204–15.

A first study of the craniology of England and Scotland from neolithic to early historic times, with special reference to the Anglo-Saxon skulls in London Museums, by G. M. Morant. *Biometrika*, July 1926, XVIII, 56–98.

This is the first general application of Professor Karl Pearson's coefficient of racial likeness to British specimens ; the results are revolutionary, and the paper deserves far fuller consideration than is possible here. We hope before long to provide our readers with a study of neolithic skulls on these lines.

A preliminary classification of European races based on cranial measurements, by G. M. Morant. *Ib. id.* December 1928, XX^B, 301–75.

Excavations in the Dutch *terpen* 1928–31. Published by J. B. Wolters, Groningen. 97 pages, 44 illus. [In Dutch].

Owing to difficulties of language we are unable to review this book as it deserves. The excavators deserve a word of high commendation for their admirable technique, nor is it lessened by the fact that the soil is good, and almost invites good results of itself. The earliest *terpen* are pre-Roman ; but the majority are later. The excavators register a new advance in technique by chemically analysing the dung forming the floors of the rooms, and so discovering which animals (including man) were housed in which rooms. The publication of this book is evidence of the very high standard of archaeological research achieved in Holland.

The Quaternary Glaciation of England and Wales, by K. S. Sandford. *Nature*, 2 December 1933, p. 863.

A survey of material collected for the Geological Congress to be held in Washington in 1934, intended to provide all and sundry, from climatologists to

archaeologists, with a non-party statement of the geologists' position. It is deliberately written as a sober and conservative document, but is all the more useful for that at the present stage.

Early Cross-slabs from the Faeroe islands, by P. M. C. Kermode. *Proc. Soc. Ant. Scot.* 1931, LXV, 373–8.

These crosses in a Celtic tradition are compared with one from Greenland ' not earlier than the thirteenth century '. Their exact date, however, cannot be determined with certainty.

Sur le tribulum, par G. H. Luquet and P. Rivet. *Mélanges Iorga* 1933, 613–38. [Review in *L'Anthropologie*, 1933, XLIII, 598–9, illustrated by a photograph, taken by one of the editors outside a shop in Tunis, rue Bab bou Saadoun].

Megalithic remains in South Sumatra, by A. N. J. Th. à Th. van der Hoop, translated into English by Shirlaw. W. J. Thieme, Zutphen, Holland. [Review in *L'Anthropologie* 1933, XLIII, 596–7].

Bulletin de la Société de Préhistoire du Maroc, 1932, nos. 1, 2.

Number 1 is filled by an article by M. Jean Gattefossé, entitled ' L'Atlantide et le Tritonis Occidental '. The name of Atlantis is a danger-signal to the wary, and they will find here just what they would expect, a farrago of mythology, pseudo-science, etymology run mad, and pure untrammelled imagination. A typical etymology is that of Iberian from Hyperborean by way of a hypothetical Iberborean. The Sileni, who are described as autochthonous to Atlantis (situated it should be explained, in the western Sahara) ' are identical with the Carians and, if they did not originate in the American continent, they had at least had continuous relations with America from a very remote time ; they had red hair '. Connoisseurs of this particular form of lunacy should not miss this article.

Number 2 contains two informative and well illustrated articles on palaeolithic sites, ' Quartzites taillés de la region cotière de Rabat-Maroc ', by R. P. H. Koehler, and ' Station mousterienne à quartzites du plateau de la carrière Martin, à El Hank '.

Excavation of 'Atlit, 1930–31 : the southeastern cemetery, by C. N. Johns. *Quarterly of the Department of Antiquities in Palestine*, vol. II, 1932.

The excavation of the medieval seaport which lay under the Pilgrims' Castle at 'Atlit brought to light a Phoenician settlement. Rock-hewn shaft-graves have been discovered, revealing evidence of occupation lasting from about 900 B.C. down to the Hellenistic period. The culture was an eclectic combination of Greek, Egyptian and Oriental elements. These graves form only a part of the cemetery and the report is provisional.

Deux gisements extrêmes d'Iberomaurusien, by E. G. Gobert and R. Vaufrey. *L'Anthropologie*, September 1932.

A good general account of the Upper Palaeolithic, or Mesolithic culture which extended all along the northern littoral of Tunis and Morocco, and appears to have flourished alongside the more southerly Caspian, and to have developed out of an indigenous Mousterian culture. It is distinguished by the large number of microliths found. The name *Iberomaurusian* was coined at a time when this culture was believed to have close affinities with those of southern Spain, affinities which are now considered much more doubtful ; and the authors of this article suggest *Oranian* as a substitute.

L'Anthropologie, June 1932.

The number contains (1) an illustrated account of two palaeolithic rock-shelters at Gorge-d'Enfer in Dordogne, by D. Peyrony, which were excavated in 1863 and 1892. (2) An account of the analysis of pollens in peat-bogs, and its application to the study of the Quaternary Age and of Prehistory, by Georges Dubois. Some of the results of the analysis, especially the fixing of the succession of types of afforestation in different parts of Europe in the post-glacial period, are stated. (3) A note by the editor, M. Vaufrey, pressing for the scheduling as historical monuments of those prehistoric sites in which France is so rich, and which have too long been allowed to be exploited for profit. M. Vaufrey argues that a part at least of the remaining untouched sites should be left ' sealed ' for posterity, and that what is now needed is the adequate publication of the enormous amount of prehistoric material excavated during the past 50 years. There is a concise account of the actual state of the law in France on the subject of excavation in general. (4) Continuation of studies of palaeolithic stratigraphy by the Abbé Breuil and Professor Koslowski : basse terrasse de la Somme.

University of Liverpool : Annals of Archaeology and Anthropology. Vol. xix, nos. 3–4, 1932.

Professor J. Garstang's report on his excavations at Jericho deals mainly with the Bronze Age necropolis, where 24 tombs have been opened (mostly middle Bronze Age). Over a thousand pottery vases, many of them new types, have been recovered. The tombs of the middle Bronze Age, and early later Bronze Age are approximately dated by a series of 80 scarabs, mostly of Hyksos date, but some of the early xviiith Dynasty. The evidence points to a total interruption in the life of Bronze Age Jericho about the end of the 15th century B.C., the next trace of occupation being dated about 1200 B.C.

A fully illustrated report on the British Museum excavations at Nineveh during the season 1930–31, by R. Campbell Thompson and R. W. Hamilton, shows that the Temple of Ishtar is now certainly proved by the discovery *in situ* of two inscriptions of Ashur-nasir-pal, recording his repairs to the temple. The temple is now known to have existed as far back as about 2450 B.C. and the names of eight kings who repaired it from then onwards are known, down to its destruction in 612 B.C.

NOTES AND NEWS

The Fort at Caersws and the Roman Occupation of Wales, by T. Davies Pryce, F.S.A. *Montgomeryshire Collections* (Powysland Club) 1931, XLII, 17–52.

As yet no full account of Professor Bosanquet's pre-war excavation of the important Roman fort of Caersws has been published, and this article is particularly welcome. It deals mainly with the Samian ware found on the site and includes a detailed description of the more important pieces. The evidence from Samian indicates an intensive occupation during the last quarter of the 1st century and the first decade of the 2nd century. There appears to have been a definite depletion of the garrison at Caersws during the later years of Trajan's reign, but it is possible that occupation of some kind was prolonged into the reign of Septimius Severus. The latest identifiable coin suggests a further habitation of the site down to the end of the third quarter of the 3rd century.

A sketch of Roman Powysland, by F. N. Pryce. *Montgomeryshire Collections* 1932, XLII, 86–113.

A useful summary of the state of present knowledge of the Roman occupation of Montgomeryshire. It emphasizes the need of excavation of known fort-sites and the identification of Roman roads. The series of coins found in this area away from a few large settlements does not begin until the 2nd century, and with one exception there is no coin later than Constantius II (d. 361). The native hill-top camps in this county, which are very numerous, have hardly been excavated at all, so that the extent of Romanization of the native population remains quite uncertain.

Estruscan Art—the painted Urns of Chiusi, by Dr Doro Levi. *The Times*, 3 February 1934, pp. 13–14.

An account of recent excavations at Chiusi, midway between Rome and Florence, where there is an immense necropolis of Etruscan tombs. It was first discovered in 1818 and excavations were later carried out by Alessandro François, but for nearly 50 years the site was neglected until in 1926 Dr Levi was asked by the Reale Soprintendenza delle Antichità dell' Etruria to renew investigations. Among the most important of the tombs is one known as ' del Colle ', with mural paintings of the early 5th century B.C., and another at a place called ' Le Tassinaie ' is considered to be of the 2nd century. In the latter was found a magnificent painted terra-cotta sarcophagus, now in Chiusi museum. A quantity of urns, carved in low relief, of the 3rd century B.C., were found in the tomb called ' the Grand Duke ' and another collection in one known as ' the Pellegrina '.

The museum contains a fine collection and Dr Levi describes some of the most important of the objects. He says that the museum ' offers a synthesis of the whole development of art in and around Chiusi, indisputably the highest and most varied left by the Etruscan civilization '.

Reviews

HOMER AND MYCENAE. *By* MARTIN P. NILSSON. *London : Methuen, 36 Essex Street, W.C. 2, 1933. pp. 298, 52 illustrations, 4 maps. 21s.*

Professor Nilsson has produced a great book—almost. I say almost because there are some vital omissions, and because he treats some of the views with which he deals (and he summarizes many hundreds of theories and hypotheses) in so summary and abrupt a fashion that he has clearly not attempted to understand them. But his book will remain one of the most important contributions to Homeric studies produced for many years.

He examines first the alternative literary views on Homer and the Homeric poems. This he does with brevity, common sense and great skill. Next he assembles the evidence, mainly archaeological, which enables us to reconstruct the history of the Mycenaean Age as opposed to the Cretan world. Having assumed in the preceding chapter that the only point on which all disputants were agreed was that there were pre-Homeric songs which Homer used in composing his poems, he goes on to exhibit that world in which those songs grew up. Proving that the mainland inhabitants of Greece were, soon after 2000 B.C., settled and blended with a non-Greek native population, and speaking primitive Greek, he then shows how the Minoan intrusion of culture about 1600 marked a new break. But he carefully points out how the Mycenaean culture that developed from this new admixture of elements was wholly distinct in character from Minoan. Here he restates a view already expressed by others but he restates it with peculiar clarity. He also stresses the northern characteristics of the Mycenaean version of Aegean culture. To supplement this conclusion he adduces the evidence of dialects and classifies them chronologically. Here the rôle of the Ionians as the earliest Greeks with the earliest dialect, and the first Greeks to be squeezed out of their homes by successive arrivals of Greek immigrants from the north, is important. He then sketches the history of the ' foreign policy ' (if we may call it such), of the Achaean empire, and shows how the prominence of Troy was due to the fact that the Trojan expedition was the last of the great raids, and so the one most likely to survive in memory. The author next attempts to analyze the datable elements in Homer. Here he is on dangerous ground and his conclusions are not always reliable. But he makes the important critical point that scholars have sought too often to make the evidence square with their pre-conceived theories, and he shows how various material objects mentioned in the Homeric poems have been attributed to periods from the Minoan to the Archaic Greek with equal success or failure. In the matter of the Phoenicians he is not so satisfactory, and his own views seem also to smack of pre-conceived theorizing. Dealing next with the mixed dialects of the poems themselves he gives an admirable survey of the dialectical strata and concludes with the sound but startling decision that ' there are words in the Homeric poems which go back to the Mycenaean Age '. Homeric language, he maintains, goes back into remote times and archaisms were preserved through a long-established epic technique

which drew from many ancient sources. Thus, at last, we are able to equate the linguistic archaisms and survivals with the archaeological, to which they are strictly parallel. A chapter on epic poetry in other lands covers ground already known, and there is nothing new to add of great importance. But the Greek Epics are to be found originating in ' the glorious Mycenaean Age ' as songs in praise of contemporary men and events. Some topics did not survive, except by casual mention, down to the time of Homer. The epic on the War of the Seven Against Thebes, a war between elements within the Mycenaean world, did not survive. But the bulk of the songs wandered, after the dispersal of Greek peoples at the close of the Mycenaean Age, to Asia Minor. Renewed settled life led to an increased demand for poetry and to a renaissance of epic. A great poet and personality now by good fortune appeared who ' infused new life and vigour into epic poetry, putting the psychology of his heroes in the foreground. Therefore Greek epic excels all other epic '. Here, in short is Homer. The conflict of Unitarians and Separatists is rendered unnecessary. For both parties might concede a Homer of this kind. He is both personality and tradition. The Homeric poems were both written by Homer and by many ancient bards. But Professor Nilsson confines his conclusion to the author of the Iliad. ' Another great genius appeared ' he explains, ' the poet of the Odyssey, whose latest elements refer just to the Orientalising Period and the Age of Colonisation '. So, in effect, Professor Nilsson has welded Homer again into one and then split him into two. In the place of Unity and Separatism we now have Dualism. On the whole a plausible and not unsatisfactory conclusion.

The book bristles with contentious matter. I will take the most contentious first—the conclusion just referred to that Homer is double. Here the author seems to be committing just that sin for which he lashes so many others. He is convinced that the Odyssey is later in style and subject, and so is driven to make every incident in it that seems early belong to the latest possible date. The Odyssey he maintains, deals with ' the adventures of merchants and colonists during their sea-voyages ' of a time when Greeks were beginning to oust Phoenicians from the sea. There is no hope, he says, of rediscovering Odysseus' palace on Ithaca. To this end he maintains that the cycle of Odysseus is post-Mycenaean, although Odysseus himself goes back to the Mycenaean age. Scheria, to Professor Nilsson, and the thirteen kings of the island, represent a very late stage of political development. Alkinoos and his palace belong to a date when the aristocratic state of early Hellenic Greece was developing. But supposing Professor Nilsson had derived the impression that the Odyssey was contemporary with the Iliad, he could equally well have maintained that Scheria was a memory of Crete, its palace, town, harbour, sailormen and nautical setting a survival from the great days of Cretan hegemony. The thirteen kings would resemble the independent kinglets of Phaestos, Mallia, Cnossos and other Cretan sites—for here too is a foretaste of Greek Aristocracy !—the evident matriarchal rule of Queen Arete (which the author conveniently ignores) would correspond to what we believe to have been Cretan custom. The tale of Nausisthoos, which he does not mention at all, would preserve the story of troubles between Crete and the mainland, Nausicaa would be any Cretan beauty and her home a Creto-Mycenaean palace. Instead Professor Nilsson places the whole Scherian setting in post-Mycenaean times just because he wants to. I think I have made it clear that Scheria can equally well and equally unconvincingly be made pre-Mycenaean. But that is one of the consequences of building up a perfect building too rapidly. Some of the bricks tend to crumble,

especially if they are older than they seem. The author's omission of all discussion of the survival of Cretan nautical tales of, or memories of, Cnossos is serious. Few people believe today that Phoenicians in Homer represent Cretans. But the Cretans may be there all the same, hidden under some other bushel.

Another omission. The Achaeans, their history and language and origin form one of the most important contributions in this book. Yet while the author states how they were ' a people immigrating from the north ' and shows how their knowledge of amber, their use of boars'-tusk helmets, and their manner of life was northern, he makes no sort or kind of attempt to trace their northern home or even to give the vaguest hint of their European habitat. In a book in which the Achaeans take pride of place this is a most serious blemish. But the reason is evidently that the Professor has made no study of central European archaeology. If he had he would surely have noticed, not the miserable boars'-tusk pendants of neolithic Olynthos, which he takes to be the northern prototypes of Mycenaean boars'-tusk helmets, but rather the helmet-boss in bone and perforated tusk-laminae from Vattin in Hungary, which provide the perfect prototype in time and place for the Mycenaean usage. Transylvania again provides innumerable parallels for the Mycenaean usages in the Bronze Age. They are not mentioned. The trouble is that Prof. Nilsson's farthest north is several hundred miles too far south. I shall look forward to seeing his analysis of central European archaeological material in its Mycenaean context, though his handling of the Olynthos material does not encourage me to think that he will master it easily.

A further omission is a full discussion of the alternative theories of the ' two-dynasty ' view of the Tholos tomb controversy and its rival the ' single dynasty ' view. In a book of this nature that problem ought to have been discussed in full with genealogical evidence fully examined. The author may complain that this was no part of his thesis. But the title of his book leads one to expect a discussion of all outstanding matter of importance that concerns Mycenae.

In another matter the archaeological evidence is strained. The fact that no inscribed tablets, and very little writing at all, is found on the mainland is taken to prove that Cretan influence on the mainland was not so potent as the barbarian nature of the mainlanders. A great and important conclusion—but based on negative evidence alone. One *cache* of tablets found, and it will fall to the ground.

There are many minor matters. The already famous Mycenaean inscription of Asine (p. 78) as originally transcribed by Persson had the name Ποσοιδά*Fονος*. Prof. Nilsson without explanation gives here the transcription Ποσσιδά*Fονος*. The difference of course, is the difference between an Achaean ' Arcado-Cypriot ' dialect and Dorian, consequently a difference of some centuries in dating. If Doric, then the Professor's thesis falls to the ground. A comparison of Persson's transcription with Nilsson's shows that the sign in question has been altered from the Cypriot *to* into the Cypriot *se*. No doubt the alteration is sound (even if the sign in the inscription is thoroughly ambiguous), but there should have been a very precise explanation of the change, which is just thrown at our heads and given in a footnote. I do not feel happy about this very scratchy inscription. It may as well be Minoan as Greek, if its signs can be reinterpreted so easily. Again Prof. Nilsson's archaeological methods give me pause.

On p. 261 the author maintains that the Mycenaean date of the Bellerophon myth ' is proved by the representation of the Chimaera on a glass plaque from Dendra '. Examining the photograph of the plaque in question once more, I feel the gravest

doubt in identifying it as a Chimaera, or indeed, as any recognizable beast at all. Archaeological proof must be more rigid than this.

The following errors and misprints are noted : p. 20, ' he ' omitted from the first line ; p. 34 ' kind ' for ' kinds ' ; p. 75, ' fig. 32 ' should be 33 ; p. 80 ' Myceaean '; p. 81 ' fig. 11 ' for 13 ; p. 82 ' fig. 51 ' for 52 ; p. 95 ' Clytaemestra ' ; p. 140 ' corsleti '; the reference to the wealth of Thebes attributed to 14th century on p. 158 and 15th century on p. 157 ; p. 188 ' each other ' for ' one another's ' ; p. 190 n. ' Neuphilogische ' ; p. 209 ' centring around '. But there are many splendid things in this book and many concise solutions of old difficulties. Thus the acute judgment on the ' shield of Achilles ' which warns us not to expect epic poets to give us photographs of works of art (p. 152) ; the attribution of the Homeric poems in their primitive state to Argolis-Boeotia (p. 177) ; the description of the mode of Achaean occupation in Greece and the suggestion that in the Persian kingship we can see a late survival of the Achaean kingship, natural enough in an Aryan folk. These are but a few of the gleanings. The book is a rich harvest of material from which every Homeric scholar can profit.

STANLEY CASSON.

AN ECONOMIC SURVEY OF ANCIENT ROME. *Edited by* TENNEY FRANK (in collaboration with other scholars). *Volume* I : Rome and Italy of the Republic. *The Johns Hopkins Press, Baltimore*, 1933. *pp.* XIV, 431. 16*s.*

This is a work that should be sure of a warm and ready welcome. The economic factors in history have sometimes been underestimated or neglected : our generation is being taught by painful experience to assign to them their just value. And not only are those factors important, but they are also, in many cases, obscure and difficult to analyse. They demand special study—and special study on the lines suggested by this book, that is to say, study based on actual sources rather than on pre-conceived general hypotheses.

This first volume, which is given up to Rome and Italy of the Republic, is very suitably undertaken by Professor Tenney Frank himself, who has proved his capacity for the task, not only by his own more general studies of Republican history, but also by a number of successful and penetrating economic researches. The material is arranged in the first place chronologically, in an introduction and five chapters, covering between them six different periods. Inside each section, there is a rough classification by subject, which is varied to meet the needs of each particular case. At first sight, one might be tempted to ask for a more rigid framework ; but, probably, after reading through the book, we shall admit that the author's arrangement is excellently adapted to the unevenness and irregularity of his material.

It is a serious problem in an economic survey to know what to include and what to omit. Here Professor Frank has made his decisions wisely and liberally. He has introduced only so much general history as is really necessary for the following of his argument, but he has interpreted the words ' economic history ' generously. In his first period (before 387 B.C.) he gives us some idea of the relations of early Rome to Latium and to foreign powers, he quotes the Twelve Tables for all references that bear, even remotely, on economics, and outlines a ' Servian Constitution ' of the State after 444 B.C. In chapter I (387–264 B.C.) he discusses foreign commerce in the light of the second treaty with Carthage, and suggests how architecture and art may give us some indications as to the general trend of Roman development. Chapter II (264–200 B.C.) is rich in detail of a definitely economic stamp : the estimates of the budgets

of the 1st and 2nd Punic wars are of particular interest. The extension of colonization in Italy comes in for interesting discussion. In chapter III (200–150 B.C.) the author has a material of uncommon value in the shape of the lists of booty, so generously recorded by Livy. Basing himself on these and kindred documents, he is able to project a very interesting and suggestive scheme of the public finances of the period. Here, even apart from the author's own results, his collection of material is certain to prove most valuable. The last two chapters (150–30 B.C.) are the richest and, at the same time, the most involved. A very considerable amount of general information of various kinds has been preserved and, in an *embarras de richesses*, we may be tempted to wish that Professor Frank had allowed himself to arrange and interpret rather more than he has done. But, perhaps, he has been right, even here, in holding to his original plan of offering evidence rather than hypothesis.

In a book as rich in detail as this is, points of criticism are bound to occur. In the earlier chapters, the author will seem to some too conservative. He uses the first treaty between Rome and Carthage as reliable evidence for the late 6th century B.C. He cannot indeed leave the ' Servian ' constitution in the 6th century, but suggests placing it in the late 5th. His treatment of the early coinage is perhaps a little disappointing. The study of the subject is admittedly in a state of transition, but it is becoming increasingly certain that Haeberlin's hypothesis, based essentially on an estimate of probabilities (cp. here, p. 43) does not correspond to actual fact. More serious is Professor Tenney Frank's uncertainty as to the value of sums expressed in Asses from earliest times to the 2nd century B.C. Every student will sympathize with his difficulty, but he hardly seems conscious how very uncertain all his early calculations thus become or what a fallacious method he is following in applying a reckoning in Asses, weighing only a *sextans* or an *uncia*, to the earlier periods. To take just one example, as late as the end of the 3rd century B.C., Livy records the sale of salt by the state at a *sextans* per pound,—according to Professor Frank's estimate 6 pounds for a cent—as he himself sees, an incredibly cheap price. The explanation undoubtedly is that the sextans of the date had some two and half times the value he assigns. This conclusion is borne out by Livy's account (34, 46), of the donative given by Cato on his return from Hither Spain in 194 B.C. : it was 270 ' aeris ' per man, or, in the parallel passage in Plutarch (Cato Major 10—not quoted here) a pound of silver. One pound of silver equals 270 ' aeris '—270 Asses. The pound of silver also contains 288 sestertii. We are very near the basic equation, so common in later use, of Sestertius equals *libral* As. It would be interesting, again, to know how Professor Frank would defend his view that the *tributum* was levied in peace-time.

To insist too much on such criticism of detail would, however, be to misconstrue the author's intention and to do him a serious injustice. He has given us a wide and varied material for research; the present reviewer gratefully bears witness to the care and skill that has gone to its compilation in those sections where he himself is able to check it closely. We may hope that the author will reap the reward that he would probably choose, if he might, for himself,—that of seeing a great advance in Roman economic studies as a result of his devoted and self-denying labours. HAROLD MATTINGLY.

THE PSYCHOLOGY OF A PRIMITIVE PEOPLE. *By* STANLEY D. PORTEOUS. *London : Edward Arnold, 41 Maddox Street, W. 1. No date. pp.* XV, 438, *with 48 photographs and sketches.* 30*s*.

This book is the result of work carried out at the invitation and under the direction of the Australian National Research Council, with the co-operation of the University

of Hawaii. The author visited the East Kimberley district and Dampier Land in northwest Australia, and later he made an expedition into Central Australia. The intention was to investigate the mental status of the natives, whom the author regards as having been ' cut off, in all probability, from other racial contacts for thousands of years '. Whether he is right or wrong about the lack of contact with the outside world, there can be no doubt about the importance of the main object. The question whether the different races of mankind have inherently different types of mind or degrees of intelligence is one of the most important ones for the anthropologist and the statesman.

Professor Porteous felt that the application of recognized mental tests would not provide adequate knowledge of the native mind ; and so he was led to consider the adaptability of the aborigines to their environment, and also to try and assess the psychological value of their customs.

The book is written in two parts. In the first the author attempts by means of a narrative of his expedition to convey a general idea of the Australian environment. In the earlier chapters of part II he describes, and discusses the psychological importance of, the social organization, totemistic beliefs, and such ceremonies as those of initiation ; and in the later chapters he deals with the application of personal tests.

The main plan of the book lends itself to some criticism. The output of scientific literature is so large that most specialists have a very serious difficulty in reading even the more important work ; and it is much to be desired that authors who have a contribution to make should make it as briefly as possible. The present book is in the reviewer's opinion too long. The narrative form in general degenerates only too easily into the traveller's tale, and the author of this book has been tempted to include some things that do not appear to be strictly relevant, as, for instance, the history of the Beagle Bay Mission station, however interesting that may be in itself. It might have been possible to deal with what is essential in the author's description of the environment in less than 198 pages.

The reviewer does not mean, however, to imply that part I contains nothing of value. Much of it is very interesting and scattered through it there are the records of many first-hand observations. Chapter VII, on Stone Age workmen and their ways, describes the ingenious technique—which the natives must have evolved themselves—for making spear-heads out of glass bottles. This shows that they are quick enough to accept a new element that fits into their cultural pattern, and it suggests that the simplicity of the Australian material culture cannot be explained solely by mental inferiority. It is interesting, too, to find a psychological element in diffusion described on pp. 114, 115. A variety of boomerang, made solely in the northwest and in parts of Queensland, is carried by trade to districts further southward, where it is much prized but apparently seldom copied. There is among the natives a tendency to respect another man's inventions, a tendency which I have noticed in children in this country. ' This no belongem my country ' seems to be a sufficient reason for not copying an imported object. Professor Porteous also suggests that respect for the arts and possessions of strangers may be associated with the fear of the unfamiliar.

Part of chapter X is devoted to an interesting little biography of the aboriginal ' man in the street ', or his equivalent. In chapter XII the author deals with environmental handicaps, and points out the influence they exert on a culture. The Australian cultures must not be judged without reference to these handicaps ; the natives have a

detailed knowledge of their surroundings and show much ingenuity in exploiting it. Since the quest for food and water makes necessary almost continuous movement from place to place, and since there were no animals that could be domesticated for transport, the material possessions of the people were practically limited to those they could carry with them.

In writing part II the author has been faced with the difficulty of his public. He seems to be writing for ethnologists, psychologists, and sociologists, and since he assumes that each kind of specialist is ignorant of the others' subjects, he has included a good deal of ethnology, psychology, and sociology that can be found in other books. This also helps to increase the size of the volume.

Chapter XIV contains speculations, after the fashion of Desmolins, on the origin and spread of the Australians, and in the next one the author discusses the traits of character evinced by this people or attributed to them; and he concludes that some indicate simple-mindedness or childish reactions ; but they must be considered in relation to the extreme limitations of aboriginal experience. We then come to the tests, the values of which are first discussed. Professor Porteous thinks that the few tests suitable for primitive people give only a partial view of their mentality. Remarkably few can be considered to measure innate capacity apart from the effects of experience and education. There are other difficulties to be considered, such as differences of culture, language, and interest. Then, too, if the tests take too long the natives may lose interest ; and one can never be sure whether they are really trying. The author is to be commended for the fairness and impartiality which he shows throughout his treatment of these tests ; he concludes that ' the test results obtained do not represent an altogether just estimate of aboriginal intelligence '.

As part of his work Professor Porteous took a number of physical measurements (chap. XIX), such as standing and sitting height, and the length, breadth and height of the head. His figures indicated an average cranial capacity of 1323 c.cs. for a group of natives from the northwest, and of 1353 c.cs. for a group from central Australia. This is appreciably less than the European average. The author claims that inferior grades of intelligence occur more frequently among small-headed people than among those with large heads.

Later chapters are devoted to tests of temperament and intelligence, to memory and specially devised tests, and to children's tests. It would take up too much space to give a précis of these ; but it is due to the author to say that he is careful to avoid making statements that are unsupported by his facts. While believing that ' mental differences associated with race are real and significant ' he sums up the results of his investigations by saying that in tests dependent on speed the natives scored low marks, because hurry was unfamiliar to them ; they were also poor at rote memory ; but ' considering their unfamiliarity with the test situation the aborigines' response to tests of prudence and planning capacity, discrimination of form and special relations in test material familiar to them was little if any inferior to that of whites '.

This has been a difficult book to judge. The reviewer is of opinion that many specialists will read it with profit, but with a recurrent feeling of irritation at what he believes to be its unnecessary length. On the other hand, anyone with a moderate amount of leisure will find in it pleasant reading for several evenings from which he will obtain a good deal of enjoyment, and not a little valuable information. The book contains a number of good illustrations of the natives and their surroundings.

R. U. SAYCE.

LES OUVRAGES DE PIERRE SÈCHE DES CULTIVATEURS D'AUVERGNE ET LA PRÉTENDUE DÉCOUVERTE D'UNE VILLE AUX CÔTES DE CLERMONT. *By* P.-F. FOURNIER. (Reprinted from *L'Auvergne littéraire*, no. 68, 1933). *pp.* 79, *with plans and illustrations.*

This article refutes the claims put forward for the new 'oppidum' to the north of Clermont-Ferrand; it is also a valuable contribution to the agricultural history of Auvergne. The thesis that the stone heaps and dry stone walls on the Côtes de Clermont represent the ruins of a town—despite the fact that similar and often larger piles of stones are to be seen on almost every hill and plateau in the region—provides material for a fine cautionary tale, and few readers of this journal will disagree with M. Fournier's comment that dry stone exercises a singular seduction on men's minds. What, then, are these accumulations of stones? They are monuments to the industry and tenacity of the French peasant. On the plateaux the soil is shallow, and, in its natural state, choked with stones, often large, which have to be removed before cultivation can be attempted. The peasant takes them to the edge of his plot, where a stone wall rapidly grows up, increasing often, in the course of years, to four or five metres in thickness. Other stones may be piled up in the centre of the plot, where a large circular heap tends to develop. On the flanks of the hills the same process goes on, complicated by the necessity of cultivation in terraces, so that the superfluous stones are used to build stout retaining walls. Along with these structures must be noted the dry stone *cabanes* (see ANTIQUITY, June 1933, pl. I, p. 216). In localities where the basalt splits easily into rectangular blocks their roofs are made with overlapping blocks into a rough domed shape, which tempted M. Busset to use the dangerous analogy of Mycenaean work. The large number of these 'Gallic' habitations claimed for the Côtes de Clermont is reached by counting in, as collapsed huts, the circular stone heaps mentioned above. M. Fournier gives numerous photographs of the results of *épierrage* in Auvergne and elsewhere, and of a whole series of *cabanes* of various forms, and there are ample references for all those who wish to chase further any of the many hares he starts.

This painful process of securing extra cultivable ground could only go on in a period of cheap labour and flourishing agriculture, when even the most unpromising land was of value. M. Fournier believes that most of the stone heaps, in their present form, belong to the late 18th and early 19th centuries, as for many years now there has been a retrogression of agriculture in the district, accelerated by the rapid industrial development of Clermont. As an example he sketches the agricultural history of the plateau of Gergovia, which 16th century records show was then pasture land, but there were already great heaps of stones lying about testifying to an earlier period of intensive cultivation—probably the 13th century. We are told how the men of Romagnat, to the north of Gergovia, marched out in 1757, headed by four of their number carrying guns, to assert their claim to the pastures, but were met by the men of Merdogne, ready to protect their rights, and a *rixe* ensued. The squire of Merdogne successfully enclosed, after due legal formalities, one-third of the plateau; this enclosure was annulled by revolutionary legislation, and in the year IV the plateau was divided up among the 544 inhabitants of Merdogne, each receiving three strips, so that all should have a fair share of the best land. Though the number of inhabitants is now far smaller, and the plateau is once more mainly used as pasture, this strip system is still the legal basis of land holding on Gergovia. An air photo of the mountain is given, from which an idea of the regularity of the strips, marked out by

their *épierrage*, may be obtained, though as aerial photography it can hardly be called a success.[1]

The second half of the article is devoted to criticism of the attempted identification of the Côtes de Clermont as Gergovia,[2] and contains much good commentary on medieval charters and place-names (here M. Fournier, the Archiviste of the Department, speaks with particular authority), on topography and on the text of Caesar. All friends of French archaeology will hope that M. Fournier has succeeded in his aim of putting an end to the unfortunate episode of the *affaire des Côtes*. OLWEN BROGAN.

MIDDELALDERSKE BYFUND FRA BERGEN OG OSLO. *By* SIGURD GRIEG. *Oslo : Norske Videnskaps-Akademi*, 1933. *pp.* 430, *frontispiece and* 376 *text-figures. Price not stated.*

This book describes the ' small finds ' of the Middle Ages and later from the towns of Oslo and Bergen. It is a work that museum-curators will discover to be really valuable, and we could do very well in this country with one or two books on the same scale to help us with our own material of this kind. For Sigurd Grieg has not given us just a handful of interesting bygones or a collection of pretty ' museum ' pieces ; on the contrary, he has set out bravely to survey the whole depressing gamut of these urban odds and ends, of which we see so much in museums and of which we know so little. And what stuff it is ! What a falling off from the admirable Viking Period antiquities that Dr Grieg has described so well in another work ! In all the book there are scarcely half a dozen objects at which a fastidious collector would look twice. But if medieval Norway has little to show us that is attractive, it is not a fault that can be laid at the door of our industrious author, for whom there can be nothing but praise. He has realized that the slum-débris and rubbish-dumps of these two towns are a more important part of his country's archaeology than, for example, his one sumptuous exhibit, the beautiful Limoges gemellion found in Oslo harbour. And so he goes patiently and learnedly over his undistinguished material—ecclesiastical antiquities, domestic furniture, glass, metalwork, and pottery, kitchen-utensils and household appliances, personal ornaments and toilet articles, armour, weapons, and tools,—and finds time also to discuss the evidences of foreign trade and of funeral customs. We shall all be very grateful to the author, but, needless to say, we have as usual to interrupt our thanks by asking angrily why there is no index ? It is monstrous that a book of this sort should be published without one, and if you want to satisfy yourself that the list of contents, though a good one, is not a sufficient substitute, please try to find the gemellion in it, *quickly !* T. D. KENDRICK.

THE OLD STONE AGE. *By* M. C. BURKITT. *pp.* XIV, 254, 9 *plates and* 30 *text-figures.* PRIMITIVE ARTS AND CRAFTS. *By* R. U. SAYCE. *Cambridge Press*, 1933. *pp.* XIII, 291, 1 *plate and* 58 *text-figures. Each* 8*s* 6*d.*

Here are two further volumes in the Cambridge series which started with Mr Burkitt's *Our Early Ancestors.*

Mr Burkitt's well written book on palaeolithic times is for students of prehistory in general, and for those in particular who have only recently come to the study of

[1] M. Fournier informs me that after he had corrected his proofs, this illustration was put the wrong way round by the printer. O.B.

[2] See ANTIQUITY, June 1933, pp. 216–19. EDITOR.

prehistoric archaeology. The author's hope that it will be useful and not prove to be too dull reading is amply justified.

One need say but little about the familiar matter and well known illustrations which necessarily appear. The two chapters dealing with geological problems and geological and archaeological correlations are especially good, the diagram showing the relationship between the Thames and East Anglian deposits being clear and free from irrelevant detail. Prehistorians are now beginning to find that an early culture is not by any means a simple undifferentiated complex, and have to realize that Europe in lower palaeolithic times was inhabited by several races living side by side. Mr Burkitt makes a point of divorcing the core-tool makers of western Europe from the flake-tool makers who dwelt further east, and hazards a guess that the flake-tools may eventually be found to be the products of different races with interrelated cultures.

A Kentish reader is bound to notice the slight error in the spelling of ' Ightham' on page 100.

Mr Sayce, in *Primitive Arts and Crafts*, emphasizes this same matter of independent evolution in a study of the Bambata Cave in southern Rhodesia, where typical Le Moustier points from the basal layers develop upwards into Solutré laurel leaves which are closely allied to those of Europe, though there was no cultural relationship between the two centres in upper palaeolithic times. Mr Sayce's book is, in fact, full of interest to the archaeologist, though its avowed purpose is to give a general idea of the modern approach to the study of material culture in primitive peoples. There is scarcely a point in the very wide field covered by his subject that the author does not deal with, from culture and all its implications, to seasonal rhythm and survivals. His choice of an example of diffusion—the spread of tobacco—is a particularly happy one, and it is well described.

R. F. Jessup.

HANDBOOK TO THE ROMAN WALL. *By* J. Collingwood Bruce. *9th edition. Edited by* R. G. Collingwood. *Newcastle-on-Tyne : Andrew Reid and Co.*, 1933. *pp.* x, 221, *illustrated.* 3s 6*d.*

It is great testimony to the permanent quality of a book that seventy years after its publication, and when the last edition (1924) has been twice reprinted, another edition should be called for. It is still greater testimony to Dr Bruce's Handbook that the editor should have decided he must not merely rewrite the book in the light of the great advance made in knowledge of its subject, but rewrite it in such a way that ' the book shall still be Bruce's '.

Unquestionably the editor is right. On the one hand the attempts made in the later editions to embody new knowledge have been wholly inadequate, and even the unique merits of Bruce's ' local description ' must ultimately fail to outweigh the fact that the book does not keep pace with modern knowledge. On the other hand Bruce's book, is, as the editor says, a very good one whose groundwork of thought and arrangement is unshaken by the passage of time, and it has played a great part in stimulating interest in the Wall. It is fitting that it should be enabled to do in the future what it has done in the past.

The new edition reproduces with the necessary revision the three chapters (introduction, general view of the works, local description) which made up seven-eighths of the original. It omits the three short chapters and the two appendices which dealt with matters not strictly relevant to the Wall proper. A new chapter, a recognition

of the undoubted fact that the handbook is of value to students as well as others, contains a select bibliography for the topographical details summarized in the chapter of ' Local Description '. The great majority of the old illustrations have been retained and many new ones added, and there is a new plan of Birdoswald, a nodal point of Wall problems. There are too—and this is a new feature which may not find universal favour—six full-page drawings to illustrate the scenery through which the Wall runs.

The editor has done well what he set out to do. It is no small achievement to have brought the book thoroughly up to date, to have added the chief results of the long years of work and study given to the Wall and its problems, and at the same time by judicious omissions to have avoided swelling its bulk so that it remains the handbook it was intended to be. But it is much more that he has managed to do all this and yet preserve so much of the distinctive character and qualities of the original.

It is no more than Mr Collingwood's due to say that in this new edition of the handbook he renders to the general public as great service as he has already rendered to students of the Wall, notably by his surveys in volumes IX and XXI of the *Journal of Roman Studies*, and that he pays worthy tribute to the memory of Dr Bruce, not alone by perpetuating his work but by the spirit in which he has carried through his task and the respect he shows for views from which there is no alternative but to differ. Such a note as that, on page 80, referring to Dr Bruce's well-known explanation of the partial blocking of the fort-gateways, displays an attitude towards the original which should pacify even the most partisan of those, if any still remain, who regard it as almost a ' sacred text ' and think it ' better to be wrong with Plato than right with lesser men '.

J. J. R. BRIDGE.

DIE SCHWEDISCHE BOOTAXTKULTUR UND IHRE KONTINENTAL-EUROPÄISCHEN VORAUSSETZUNGEN. *By* J.-E. FORSSANDER. *Lund : Borelius*, 1933. *pp.* VI, 251, *with* 36 *plates*. 10 *kroner*.

Despite its modest title this book contains a masterly survey of the principal late neolithic cultures of northern and eastern Europe comparable in its scope to Åberg's well-known book *Das nordische Kulturgebiet*. But Forssander is free from certain prejudices that mar the scientific value of many works of the ' Nordic ' school. He justly condemns ' the uncritical endeavour to minimize the age of neolithic cultures on the continent of Europe in order to enhance the antiquity and brilliance of the Scandinavian '. The wealth of material and the brilliance of those who have studied it, have rendered possible a reliable relative chronology of Scandinavian prehistory that provides a very convenient framework for the prehistory of adjacent lands ; but it has been perverted into a limiting system to which the chronologies of the rest of Europe, and in the last resort even the Aegean and Mesopotamia (as in Hubert Schmidt's *Cucuteni*) have to be subordinated ! Our author, moreover, ruthlessly exposes those exponents of the typological method who build up series without fixing either end by objective criteria but ' with the aid of instinct rather than the intelligence ' like a ' musician feeling rhythm '.

A book by an investigator, living in the heart of the ' Nordic Culture ' but inspired by such a critical and objective spirit and fully acquainted with the relevant literature contains so many original and illuminating ideas and puts so many of the phenomena of the Stone Age in a new light that it deserves a rather extensive analysis here.

Chapter I contains the first comprehensive account of the Separate Grave culture of Sweden and establishes convincingly how this culture differed not only in pottery and burial rites but also in respect of accessory grave-goods from those both of the megalithic tombs and of the Dwelling Places. The relative chronology of axe-forms and pottery styles is established in the second chapter. Closed finds show that pottery of the latest style (III) and battle axes of ' Vellinge type ' belong to the beginning of the Stone Cist period. The occurrence of earlier styles of Separate Grave pottery in Passage Graves shows that the culture they typify cannot begin before the second quarter and probably not before the second half of the Passage Grave epoch. The Separate Graves of Sweden would thus be strictly parallel to those of Jutland according to the relative dating of Sophus Müller and Nordmann.

The Danish battle-axe culture cannot then be the ancestor of the Swedish though the kinship between the two is so close that the stratigraphically attested evolution of the axes and pottery in Jutland may be used to confirm the typology of the Swedish forms. Nor can the supposed separate graves of Dolmen age from Jutland be the ancestors of either group of battle-axe graves since they are separated therefrom by the first half of the Passage Grave period ; the battle-axe culture is intrusive in Denmark as in Sweden. (The relation of the cord-ornamented vases of the Dolmen period or earlier to those of the Separate Graves proper in Jutland and Sweden remains, however, to be explained).

An ancestor for the battle-axe culture of Jutland, Forssander, in opposition to Åberg and Kossinna, finds in the Corded Ware culture of Saxo-Thuringia, pointing out that the later Saxo-Thuringian beakers agree very closely indeed with the earliest specimens from the Danish Separate Graves. The Danish battle-axes, however, are not derivable from the Saxo-Thuringian faceted type, which is itself late.

The beakers, amphorae and ornaments from the graves of the Zlota group in Poland are shown to be parallel to the later Saxo-Thuringian and so to the second half of the Passage Grave period. But at Zlota there are contacts with other cultural groups, in the first place that of the Globular Amphora. In view of the prominent rôle of flint in the economy of this group it must have arisen in a flint-bearing region. Scandinavia is on good grounds excluded so that the flint-region of Galicia becomes a probable cradle. At the same time Forssander rightly recognizes unambiguous links with South Russia in the catacomb graves from which Zlota pottery has been collected in Galicia. These are justly treated as inspired by South Russian graves of the same type, the age of which is thereby fixed as not later than that of the Zlota culture and so the second half of the Passage Grave period. (If this be correct the relative age of the Copper Age graves of South Russia has been much underestimated by Tallgren).

Finally our author points out strikingly close agreements in the details of decoration between some Zlota vases and those of the earliest Swedish Separate Graves and thus makes Zlota a link between the boat-axe cultures of Sweden—and also of Finland and the Saxo-Thuringian.

He is thus able to draw up a very plausible family-tree for the pottery of the principal battle-axe cultures in Central and Northeastern Europe. Such a family tree for the typical axes cannot be constructed ; in each region the earliest battle-axes are the finest and most individual and there is no gradual divergence from a common general prototype. Forssander explains this phenomenon by the assumption that the prototypes were of metal and were independently translated into stone in the several

regions. But of course this is less than half the story. The actual copper battle-axes illustrated by Forssander (and others from South Russia not figured) cannot be regarded as genuinely metallic forms. On the other hand, long before the age of stone battle-axes, axe-like implements of antler were in use in Europe, and these exhibit peculiarities, conditioned by the material—such as the knob formed by the burr and a collar round the shaft-hole which was pierced through the base of a tine—which recur in the boat-axes, as Seger long ago pointed out.

But if Forssander's explanation of the battle-axes has to be rejected as at least one-sided, we may commend all the more his adoption of Rydbeck's suggestion that the rapid spread of the battle-axe cultures is due to the fact that their authors possessed a hitherto unknown means of transport—the tame horse. V. GORDON CHILDE.

ATHENIAN FINANCIAL DOCUMENTS. *By* BENJAMIN DEAN MERITT. (University of Michigan Studies, Humanistic Series, vol. XXVII). *Ann Arbor : University of Michigan Press*, 1932. *pp.* VIII, 192, *with* 17 *plates and* 24 *text-figures. Price not stated.*

This book is a collection of separate studies of various Attic financial inscriptions of the later fifth century. Chapter I is devoted to the quota lists of 430/29 to 425/4. Starting from the assumption, based on the analogy of the cycle of the secretaries of the treasurers of Athena, that the cycle of the secretaries of the Hellenotamiae also continued to 430/29, Professor Meritt is able to displace S.E.G. V 25 from that year. The new arrangement dates the extraordinary reassessment to 428/7 instead of 427/6. Further the reassessments after 425/4 should be dated a year earlier than previously supposed, thus making the change over to the 5 per cent. tax come at a regular reassessment period. The results are plausible, though the initial assumption is accepted a bit robustiously (cf. p. 5 para 2 and p. 12, para. 3). The argument of chapter II is that when tribes are represented in a cycle in reverse of the official order, that cycle begins with Antiochis (X) and not arbitrarily in the middle of the series. The reverse cycle for the secretaries of the treasurers of Athena is therefore pushed back to 443/2. Chapter III redates some inscriptions relating to the Chryselephantine statue. Chapter IV further elucidates the expenses of the Samian War. Chapter V makes a variety of corrections and additions to inscriptions, lists of officials and methods of accountancy. The last four chapters are chiefly occupied with the Attic Calendar, and in particular the Conciliar Year. The more important conclusions are that in the restored democracy the number of Hellenotamiae was increased to twenty, two from each tribe, to compensate for the abolition of the Colacretae ; and that the Conciliar Year 410/9 began immediately on the restoration; there was no improbable wait of perhaps two months to equate at once the Conciliar and Civil Years. Thus I.G. I^2 304 is solved, and Aristotle and Andocides placated : I.G. I^2 105, after some pruning of Wilhelm's restorations, fits quite as well for 407/6. In chapter VIII some alterations are proposed for the Mende and Scione campaign ; and Dinsmoor's contention refuted that the Civil Year was exactly adjusted to the Metonic Cycle. The book ends with the new table of the correspondences between the Civil, Conciliar and Julian Calendars from 432 to 404 B.C. Professor Meritt argues and restores convincingly, though a certain amount of his conjecture is tentative and will probably be modified by more intensive working over of related material. His numerous new readings are accompanied by excellent photos and facsimiles, and his style is clear and concise. R. M. COOK.

REVIEWS

DOCUMENTS ET NOTES ARCHÉOLOGIQUES : 3e Fascicule. *By* Louis Deglatigny. *Rouen : Imprimerie A. Lainé*, 1933. *pp.* 48, *with* 12 *plans. Price not stated.*

Our knowledge of the ' Siedelungsgeschichte ' of ancient Gaul will always be defective until its earthworks are more fully described. The ' Enquêtes ' published annually by the Société préhistorique are useful records, but hardly reach the standards of Williams-Freeman, Westropp, the V.C.H., or the Royal Commissions' reports. And at least in Normandy, the accuracy of many published plans is suspect. Without entering into a matter which is the subject of ferocious local controversy, we may congratulate M. Deglatigny on his pertinacious researches : *his* plans certainly look about as good as plans can be.

This fascicule is, perhaps, more interesting than its predecessors, because, for the first time, M. Deglatigny has done some digging on the earthworks that he records. The most important of these are some small circular inclosures with CD vertical of 3 to 4 metres and diameter (from bank to bank) varying between 50 metres (Brionne) and 10 metres (Pavilly). M. Poulain had already published a plan of one such inclosure—Château-Sarrazin, St. Aubin-sur-Gaillon (Eure) [*Bull. Soc. norm. des Ét. préhist.*, 1910, pp. 67–70]. On reading the report, I was struck by the similarity between this earthwork and an ordinary Irish ring-fort: and M. Deglatigny's researches support the parallel. We must, it seems, docket in our minds the fact that there are not a few Rath-like structures in the lower Seine valley. What is their date ? Montelius guessed that Château-Sarrazin was Norse, remarking at the same time that there was nothing like it in Sweden. And now M. Deglatigny comes out with the theory that these inclosures are Frankish. ' Il semble qu'on puisse dire ', he says (p. 29), ' d'une façon générale, que toutes les enceintes de forme circulaire sont postérieures à la période romaine proprement dite '. Unfortunately the excavations do not prove the thesis—as yet. The association of Frankish graves and circular inclosures may only be accidental, and the inclosure of Brionne (which seems, it is fair to say, to be above the average in size) is Gallo-Roman and not, perhaps, necessarily late at that. But the theory is seductive. One thinks of the moated homesteads studied by Des Marez in his work on the Frankish colonization of Belgium (*Ac. Roy. de Belgique* (2), vol. IX). and the notion of Frankish *Einzelhöfe* would not, I suppose, come amiss to Mr Joliffe. But we must know more. Thorough excavation is wanted, mere ' sondages ' are not good enough ; and the examples must be mapped and studied in relation to the geology of the district.

There is other interesting matter in the book. An earthwork at Corneville-sur-Risle of about 2½ acres in area and with an internal ditch might possibly be a ' Woodhenge ' : and there are also examples of the amorphous square inclosures, like those which M. Deglatigny has studied in the earlier fascicules. Most of those are regarded as military works of the Middle Ages. And we are taken outside earthworks with an observation on Roman foundations at Rouen, and with a specimen of local archaeological polemics.

The whole book is of the highest merit and does honour to a man who is still doing active field-work at an age when most men have retired to their fire-sides. But one lays it down with the feeling that the field-work must be followed by excavation. M. Deglatigny himself is in the succession of Cochet and De Vesly, and one hopes that, if he cannot undertake the task himself, he has disciples who will maintain the fine archaeological tradition of which he is himself the heir. C. E. Stevens.

MAP OF THE TRENT BASIN: showing the distribution of Long Barrows, etc. Scale 4 miles to an inch, mounted and folded; text *pp.* 31. *Ordnance Survey*, 1933. 4*s.*

With the publication of this map, the Ordnance Survey scheme for surveying the megaliths of England and Wales on a quarter-inch scale, begun in 1920, is now about half finished, and we are promised that within a reasonable time the results shall be published as a period map on the million scale. The Ordnance Survey has already earned our gratitude by publishing maps of Roman Britain and Neolithic Wessex, and shortly we are to have a map of the whole of Britain in the Dark Ages; is it possible that the Geological Survey may, in its turn, deserve well of us by the publication of a much needed drift-map of the British Isles on the same scale? Such a map has now become a necessity.

The Trent map, which is due to the work of Mr C. W. Phillips, is similar in format to the map of Wessex, but in view of the great differences of opinion among ecologists no attempt has been made to restore vegetation on a geological basis. In spite of this, it is easy to resolve the geographical determinants which influenced settlement in the chief regions, namely, the chalklands of the Lincoln Wolds, the limestone plateau of Derbyshire, and to a less extent on the Magnesian limestone tract northeast of Sheffield.

The Lincolnshire barrows, first recorded by Mr Phillips, have never been excavated, and their affinities must at present be a matter for speculation, though possible evidence of cremation in the Walmsgate barrow may indicate a connexion with the long barrows of the Yorkshire Wolds. In form they are all much alike, with no very strict orientation, and with the usual thickening at the eastern end. The chalk rubble of which they are built has frequently collapsed towards the eastern end, suggesting the presence of internal wooden chambers as at the well known Wor Barrow in Dorset. Mr Phillips has begun to excavate the Giant's Hills at Skendleby, and we hope that his digging will throw light on the suggested contact between Yorkshire and Lincolnshire in the long barrow period.

The western group consists of long and round chambered cairns, and stone circles of the Arbor Low type, most of which were mutilated by barrow diggers before the days of scientific archaeology. Although the Trent basin is an obvious line of penetration from the east coast, into this western region, it seems that the chief megalithic influence came from Ireland and Wales by way of the Midland Gap, and probably King Hengist's Grave and the vanished barrow at Dinnington, both of which are situated near the western edge of the Magnesian limestone belt, mark the eastward trend of Irish and Welsh elements of megalithic culture. A characteristic of this western group is the presentation of eccentric forms, due partly to the accumulation of successive burials, not all of which, however, are of true megalithic origin.

The text includes a consideration of the stone-circles which by virtue of their size and age can be grouped with the megaliths; this perforce excludes a large number of the smaller Derbyshire circles belonging to the full Bronze Age, and thus reduces the total number of megalithic circles to three.

Three open-air habitation-sites in the region have produced Peterborough pottery. Rains Cave near Longcliffe once yielded Windmill Hill pottery, and in another cave near Earl Sterndale, pottery of Peterborough type has recently been found with beaker ware in an association that suggests a living site. This discovery, when it is published, may help towards a further understanding of the neolithic and very early bronze cultures of a puzzling region. R. F. JESSUP.

REVIEWS

ENGLISH GOTHIC CHURCHES: the story of their architecture. *By* CHARLES W. BUDDEN. *London: B. T. Batsford, 15 North Audley Street, W. 1. New issue*, 1933. *pp.* XI, 145, *illustrated.* 5*s.*

This book is arranged on an unusual plan. Instead of treating the subject of ecclesiastical architecture chronologically the author takes each main feature of a church separately, and describes its development and chief characteristics at different periods. This method should prove of great help to the beginner in learning his subject. A list of the most notable churches in each of the English counties is given. The illustrations, photographs and sketches as well as plans, are good. The language is admirably untechnical, save for a single lapse on page 99, where the inexpert will certainly fall foul of the cenoids and conoids. Only two trifling misprints have been observed, but Somerset cannot allow Devonshire to appropriate the fine church of Milverton (see fig. v).

In spite of the amount of information, the style is so easy that there is no impression given of an overdose of facts. Messrs Batsford are to be congratulated on their reissue of this book. DINA PORTWAY DOBSON.

LA SCULPTURE IRLANDAISE PENDANT LES DOUZE PREMIERS SIÈCLES DE L'ÈRE CHRÉTIENNE. *By* FRANÇOISE HENRY. Vol. I, Texte *pp.* 234; Vol. II, 171 *plates. Paris: Librairie Ernest Leroux*, 1932. 500 *francs.*

This book is the second of two substantial contributions to the study of early Irish art that have recently appeared and, like its senior, Dr Mahr's 'Album', its chief and abiding value lies in its rich store of illustrations, a truly splendid collection that is an outspoken witness to Mlle Henry's painstaking industry and to her skill as a photographer. These pictures provide a really important corpus of material, some of it hitherto little known, and we can be quite sure that before long there will be many students of art, architecture, and archaeology ready to pay an enthusiastic tribute to them. It was a high endeavour that inspired the author, and a task demanding many years' work and much travelling. Mlle Henry is to be congratulated on the courage wherewith she assailed her huge subject, and on the energy that has made a monumental survey out of what need only have been a modest university thesis.

The text itself is an imposing volume, but its value, as the author would hasten to remind us, is not to be weighed against that of the album of plates. It was written and in print before any contemporary study of Celtic art had appeared, and it is to be regarded only as an introductory and experimental examination of the chief elements in Irish art. Thus in the section dealing with curvilinear ornament, Mlle Henry is at great pains to analyse La Tène patterns and to make of them a background to the Irish development. In so doing, she shows herself at one with those students who complain that they cannot find an indubitable connecting thread between La Tène art and that post-Roman art which becomes manifest first of all in England and subsequently in 7th-century Ireland. But it is surely a first duty for those who thus grumble at what archaeology cannot produce to establish the affinity of the two things to be connected. Why, in short, should there be any connexion? For who says, and on what grounds does he say, that our post-Roman trumpet-pattern and animal-ornament have anything to do with the old La Tène art? The time is coming when someone must be brave enough to give the lie to this talk of a *renaissance* of an antique Celtic art in the early Dark Ages, for the major contribution of 5th and 6th-century

Britain was a *new* art that was unrepresented in the past and will be searched for in vain. Not only in connexion with the appearance of the trumpet-pattern disc, but also in the matter of the Style II animal (in other words the ' Durrow ' complex), Mlle Henry obstinately refuses to salute one of the most dramatic inventions in the whole of our early art-history (though she plainly recognizes its existence), and through a woebegone mess of draggled La Tène survivals hurries us to turn the majestic pages of Lindisfarne and Durrow, as if they, or the British trumpet-pattern bowls, were just ground out of some old Celtic mill that had never ceased turning. Our studies of early art are going to be seriously prejudiced if we allow an obsession for continuity to detract us from a thorough study of the art as at present revealed in archaeology, and one has only to apply these fashionable archaeological methods to later art-periods in order to see how seriously they may mislead us. One feels, in fact, that Mlle Henry's pages would have been of much greater help had they given us a stylistic review of the early arts in Ireland. Her profound sympathy with Irish ornament and her extraordinary knowledge of its detail, seem to single her out as one of the few who could do us this service of defining and consolidating the styles, and it is to be hoped that she will some day extend her instructive classification of the crosses and add considerably to her ' Conclusion '. Her study of our bowl-escutcheons shows what can be done by an analysis of the styles, and there ought to be little need to emphasize the importance of grouping into schools as an essential preface to art-studies. So far as Ireland is concerned, it is plain that Françoise Henry has already done most of the work, and we are now anxious to see her elaborate the scheme lately proposed by Dr Mahr, which is so far the most helpful attempt made to break up the wealth of four centuries into archaeologically manageable sub-divisions.

It would be unfair to suggest that Mlle Henry's studies in development are not extremely useful. Her chapter on interlacing is particularly valuable, and one must pay a sincere tribute to the material collected for the sections dealing with geometric ornament, plant ornament, and figure-subjects. On two important aspects of her subject, the reviewer is not qualified to offer an opinion, but it is a duty to record that a substantial part of the text is allotted to iconography and architecture. There is, in addition, a splendid index and bibliography, and a map. It remains to say that not the least attractive part of this fine book is the charm of the author's sincere and sensitive writing. There are several passages in which she describes with delicate exactness the inmost beauties of Irish ornament, and more than once we feel, as we read, that this rare insight must have brought her nearer than any of us to an understanding of Celtic art. It is an extraordinary and a refreshing pleasure to find this quality in an archaeological book, and we salute respectfully a colleague not afraid to rank a vision of the miracle above the work-a-day duty of explaining it.

T. D. KENDRICK.

IRISH HISTORICAL DOCUMENTS, no. 2 : CRICHAD AN CHAOILLI ; being the Topography of Ancient Fermoy. *Edited* with introduction, translation, notes and map *by* PATRICK POWER. *Cork University Press, Educational Co. of Ireland, and Longmans, Green and Co.*, 1932. *pp.* VIII, 135, 1 *map and* 12 *illustrations.* 3*s* 6*d.*

One cannot honestly say that this is a book for the general reader, at least for the English general reader. Irish nomenclature, if it is not directly intelligible to the mind of the Saxon, is scarcely pronounceable upon his lips, and such a sentence as, ' Ard gC'ennanuis and Dun ar Aill are one baile and from it are Hi Fhaelain and Hi Uirisi ' does

not make for easy reading. Nevertheless the book is important for specialists in a good many fields of knowledge. The genealogist will be interested in the location of many Irish family names (it is curious to discover O'Britain's in Fermoy); the palaeographer will welcome the facsimile of the principal manuscript (from the Book of Lismore); and the student of ecclesiastical antiquities will find a study of pre-Conquest church architecture, which is well represented in this district, and will see light shed on 'coarbs' and the settlement of church lands. Indeed, the editor brings forward a wealth of facts about ancient Fermoy, and if they are thrown together in rather a casual way, there is a good index.

But it is principally as an authority upon the *Siedelungsgeschichte* of Ireland that the book merits serious attention, and it is, as the editor rightly remarks, 'a document of unique character and scope'. It records in fact, the organization of a district in north-east county Cork, the area between the Ballyhoura Hills and the Nagles mountains: the divisions of the area are recorded, as are the names of the 'families' (*sloinntig*) in each division. It is, of course, important to determine the age for which these data apply. The manuscripts themselves date from the 15th century, and purport to describe the circumstances of a grant made in remote antiquity to the druid Mogh Ruith, ancestor of the O'Dugans, and the editor makes out a fairly strong case for supposing that the organization described is, at least, prior to the Norman conquest. The largest land-unit is the Tricha Céd or 'thirty hundred', and it is stated in the tract that the area which originally formed two Tricha Céds was reconstituted into one at the time of the grant. The meaning of the term Tricha Céd has been discussed by Hogan (*Proc. Royal Irish Ac.*, XXXVIII, C. 7), and his conclusions are adopted in their entirety by the editor. But opportunity may here be taken of saying that, if Hogan is right in supposing the Tricha Céd to be an area capable of furnishing 3,000 warriors, then pre-Conquest Ireland must have had a population nearly three times as dense as that of Domesday England. It seems much more likely that a Tricha Céd was an area supposed to contain 3,000 people. How then was it possible to turn instantaneously two Tricha Céds into one? The text answers the question by telling us that it was done to diminish the tribute payable to the overlord, and this phrase gives us the very evidence of which Hogan has denied the existence, showing us the Tricha Céd transformed from a population-group into a unit of taxation. Examples of such 'degeneration' are familiar enough to students of land-tenure. The Domesday 'hide' occurs at once as a parallel. The boundaries of the original Tricha Céds are given in the text, and the editor makes a determined and, as it seems, successful effort to track them on the ground. It is most instructive to learn that the boundary follows in part the course of a 'linear earthwork', the Claidhe Dubh. Obviously, there is great scope for fieldwork in the tracing of these regional boundaries. I have noticed what seems to be a mention of another in *Fermanagh Inquisitions*, 4 Charles I, and Mr Patterson has shown me a long amorphous dyke near Armagh which may be a third.

The Tricha Céd is divided into a number of small principalities (Tuaths) varying in size from sixty to fourteen square miles. The text mentions the 'families' residing in each tuath, and gives a list of the 'bailes' in it; but it is not easy to discover either what numerical unit is meant by the 'family' or what is its relation to the baile. It rather looks as though our text gives us the development of a system in which one family occupied one baile of about two thousand acres on the average. Subdivisions of the baile are sometimes mentioned, but there is no evidence of such a schematic subdivision as is postulated by the theories of Seebohm and Meitzen.

Anyone who has toiled over the problems of local topography must feel that a man who produces results is by that entitled to the congratulation which silences criticism. Yet without wishing to be ungenerous one must say that the author might have done more and that what he has done is not entirely satisfactory. There are careless errors : he gives lists of the ' families ' in each tuath, and in these lists there are omissions. This means that he has forfeited our confidence and that all his lists must be laboriously checked by anyone who uses the book seriously. The text purports to be a ' transliteration ' of the MSS, but the editor has introduced more punctuation marks than are in his MSS, and once, at least, has created a territorial subdivision which they do not warrant. Furthermore the map suggests that the tuath boundaries are much more certain than they are. The editor is confident (some might say rash) in the notes, but this confidence should not have intruded itself on the map, for the map will be the first thing to which general students of Celtic tenures will turn. Moreover, they have a right to grumble very loudly that the map has no scale.

The editor is strangely reluctant to give help in difficulties by the use of parallel evidence, and thus the work gives the impression of being polarized both in time and space. We are told the familiar story of the division of Irish land into Quarters and Seisrighs without being reminded that such a division finds no mention in this document. One of the land-divisions which it does mention is the ' Ceapac ' or tillage plot, but the editor does not attempt to explain the significance of the term, or tell us if it is used as a land-division elsewhere. And the relation between the ' families ' and the areas occupied by them might have been illuminated by comparison with the Tipperary Survey and Butler's study of the Kerry septs. It would have been very useful, too, if we had had a map of the ring-forts of Fermoy : does their distribution fit the population evidence of the document ? Even if it did not, this would be a piece of negative evidence of great value, and would throw light on the state of things in other parts of Ireland.

One does not want, however, to end the review on a carping note. This is a book which every student of Celtic tenure must read, and read with great care. He must ask himself many questions, and if sometimes he feels that the editor should have answered them for him, he will be very grateful for what has been done. And there seem to be no misprints either in text or transliteration—a tribute to printer and proof-reader with which we may close.

C. E. STEVENS.

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